

A BLUEPRINT FOR 'ENGINEERING' SCHOOL SUCCESS

The ultimate guide to
finding internships and balance
as an engineering student

by RUPERT WILSON II

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Author Biography

“The best way to make dreams come true is to wake up.” —Mae C. Jemison

Ruperd Wilson II combined his childhood passion for engineering and his desire to give other engineering students the tools that helped him succeed throughout his academic career to write this book, *A Blueprint for Engineering Success*.

Ruperd’s father, an engineer, exposed Ruperd to the field of engineering throughout his childhood. As a child, Ruperd was fascinated with robotics and enjoyed learning how machines work. In high school, he became a member of the school’s engineering academy and robotics team. As a result of such experiences, Ruperd decided to pursue electrical engineering as a career path when he was a junior in high school.



In 2019, Ruperd earned his Bachelor of Science Degree in Electrical Engineering from the Marlan and Rosemary Bourns College of Engineering (BCOE) at the University of California Riverside (UCR). He is a member of the prestigious Tau Beta Pi engineering honors society.

At UCR, Ruperd was a member of the National Society of Black Engineers (NSBE), where he served as the public relations chair and as a student mentor. He was also an active member in the Institute of Electrical and Electronics Engineers (IEEE), and the Council for the Advancement of Black Engineers (CABE).

For his college senior project, Ruperd and two classmates created a device that detects strokes in individuals by analyzing brain wave electroencephalogram (EEG) data. Once the stroke is detected, the device sends a text message to alert family members and emergency responders.

Currently, Ruperd is a rising engineer at Raytheon Space and Airborne Systems. Ruperd works with highly-specialized teams of engineers to deliver new and innovative satellites, radars, and other aerospace-related systems and products.

In his free time, Ruperd enjoys playing the guitar, traveling, and being in the

outdoors with his friends and family. Ruperd is dedicated to self-improvement and helping others achieve their maximum potential.

Ruperd currently resides in Los Angeles, California.

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Why I Wrote This Book

I began the journey of writing this book during the spring quarter of my junior year in college. I had been successful in engineering school thus far. I had maintained a high grade point average, and completed two internships. However, I often felt as if the other areas of my life, including my physical fitness, hobbies, and social life, were suffering. This feeling caused me a great deal of stress.

I was not the only engineering student experiencing this feeling. However, I noticed a different set of my friends were doing all of the things that I was doing academically, yet they appeared less stressed and had more balance in their life. This group of people seemed to land internships and research positions with ease, maintain high grades, and hold leadership positions, all without burning out or letting their social life suffer. I wanted to know how. I wanted to know what these individuals knew so I could implement these “life hacks” in my life. I began this journey to determine all of the strategies this select group of individuals used to lead teams, land internships, and bring balance to their life.

My hope is that future engineering students will utilize the information in these interviews to help them fulfill their highest potential and become more well-rounded engineering students. If every engineer can be just 10% better, then the world will be much better off.

How To Read This Book

This book is not meant to be read cover to cover. I suggest you flip through the table of contents to find the subjects you are interested in, and then read those particular interviews. As engineering students, we seldom want to spend more time than necessary reading, so I condensed each two-hour interview into one to three pages, so you can absorb the most important information I learned from each interview as quickly as possible.

Note About Student Biographies

The student biographies were written at the time of the interview, and do not necessarily reflect the most up-to-date information about the student.

Acknowledgments

Thank you to the BCOE students who offered their time and knowledge to help prepare future engineering students for success. This book would not have been possible without their generosity.

Thank you to Elliot Emmer, a great resource who connected me with BCOE administration.

Thank you to Gustavo Correa, who consistently encouraged and gave me suggestions for how to improve this book.

Thank you to the UCR Academic Resource Center and Susan I. Henderson, J.D., for proofreading this book.

Thank you to Valeria Garibaldi for helping me clarify my vision for this project, and for being a great resource for constructive feedback.

Thank you to my parents and sisters Sarah and Saundra for always being a source of positivity and encouragement in the creation of this project.

Foreword

Becoming an engineer is not easy, that's no secret. It is, quite literally, rocket science. In colleges and universities across the nation, various programs assist engineering students in navigating their studies from day one to diploma. Activities such as orientation sessions, bridge programs, enhanced advising, peer mentoring, office hours, tutoring and supplemental instructions for selected courses all expand the student experience. Still, the four-year graduation rate in engineering remains below 40%. At UCR, 58% of our incoming first-year students graduate within 4 years, and 70% complete their degree within 6 years. While this is much better than the national average, we are eager to do even better than that!

Having experienced the power of peer mentoring, I am pleased to see that one of our own students, Rupert Wilson, compiled a set of interviews with engineering students to help those who are just setting out on the path toward their careers. Through his interviews with Vanessa, Gogol, Augie, Kyra, John, Cindy, Gustavo, and Timothy, Rupert shares ideas and tips on how to make the most of your college experience and launch your career.

Persistence is one of the qualities Rupert shares with each of the students he interviewed. He also benefitted from the encouragement of many mentors. In particular, Dr. Ernest C. Levister, M.D., deserves a note of thanks for his patronage of Rupert's endeavors. I encourage you to identify your own mentors while working closely with the faculty, academic advisors, and student services staff, who are all here to help you succeed. Finally, I hope you will also be inspired to follow Rupert's example and find ways to share the tips and insight you develop as a student with the next generation of engineers.

Welcome to your study of "rocket science" and the development of skills and knowledge that will enable you to make a lasting difference for yourself and future generations through engineering!

Marko Princevac, Ph. D.

Associate Dean and Professor of Mechanical Engineering
Marlan and Rosemary Bourns College of Engineering, UC Riverside

1 LANDING INTERNSHIPS WITH LINKEDIN

with Vanessa Coria

Vanessa is a fourth-year chemical engineering major at BCOE. She is the vice president of the Society of Women Engineers, and an intern at Tesla Motors. She is passionate about using her creativity and management skills to execute impactful projects.

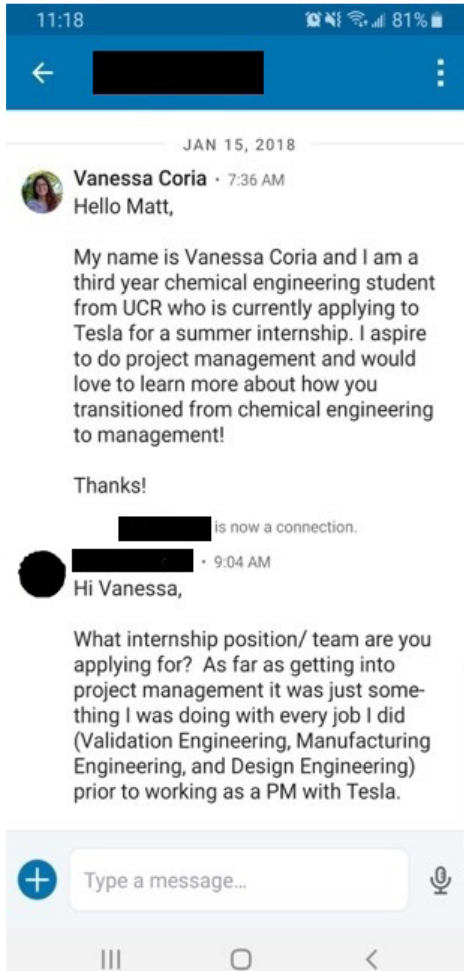
Q: *What motivated you to pursue engineering?*

A: I am a first-generation Mexican-American and a first-generation college student. My mother always pushed my sister and I to go to college so that we could create better lives for ourselves, which has motivated me to pursue an ambitious career. I want to do something that will make my family proud. As a child, I spent a lot of time with my mom in the kitchen cooking and baking. This piqued my interest in engineering because it showed me how much fun it is to create something from scratch. I was also very creative as a child so engineering seemed like a natural fit for me. I want a career where I can use my creativity and technical skills to build whatever I want.

Q: *What is your strategy for landing internships?*

A: LinkedIn is the ultimate resource to get wherever you want, and I didn't realize this until I went to an engineering networking conference. There was a speaker at this conference who taught the attendees LinkedIn networking strategies. He described how to market ourselves on LinkedIn to attract opportunities, and it really opened my mind. After I cleaned up my LinkedIn profile, I began searching for internships on the website. I first went to the pages of the companies I was interested in and looked through the UCR alumni list. On LinkedIn you can view all of your school's alumni that work at a specific company. As I looked through the alumni list, I searched for someone with whom I shared common interests. For example, I found one alumni that ran cross-country in college, which is an activity I also did in high school. I messaged this person and said, "I saw that you did track and field at UCR. I love track and field and ran for a number of years. I was wondering if you could tell

me more about your experiences in cross-country and how you apply that in your daily life now?” So I continued to reach out to alumni like this, and it really helped me establish genuine relationships with mentors and job recruiters. One of these relationships I built eventually helped me land an internship at Tesla, Inc.



Q: *What exactly did you do to get companies to start reaching out to you on LinkedIn?*

A: By posting or messaging people on LinkedIn on a weekly

basis, you can increase the number of views on your profile page. For example, on the first day of the week I connect with five new people and send them a message that says something like, “Hey, my name is Vanessa this is what I like to do and I was wondering if I can learn more about what you do and schedule a phone call with you.” On Tuesday, I make a school or job-related post about my research projects or interesting things I learned in class. On Wednesday, I share someone else’s post and comment about what I thought about it. Next, on Thursday, I “like” someone else’s status and comment on it. Lastly, on Friday, I may watch a LinkedIn learning video. The basic philosophy is that the more active I am on LinkedIn, the more my activity will show up in the feeds of the people I’ve connected with, and they will be more likely to view my profile.

Q: *Many college students struggle with finding out exactly what they want to do with their major. How did you figure out what you want to do?*

A: Exploring the opportunities in the engineering clubs really helped me learn what I am good at. For example, being the outreach chair for Society of Women Engineers made me realize I really enjoy planning events and managing people. Once I realized I enjoy this type of work and I am good at it, I used LinkedIn to reach out to different people in my network that do similar work in industry. I eventually met someone who graduated with a chemical engineering degree, but is now a project manager for a large company. He told me about the work he does, and how he enjoys traveling around the world for his job. The work experiences he described excited me and sounded like something I wanted to do. In conclusion, I figured out what I wanted to do by exploring different opportunities in the engineering clubs on campus; I found out which of those positions I

liked the most; and then I reached out to my network to find people that did similar work.

Q: *I recently read online that only 18 to 20 percent of engineering students are women. How do you handle being such a minority in the tech field?*

A: It's a challenge being a woman in engineering, but the key thing that has helped me is knowing I'm not alone. I've reached out to women engineers and faculty on campus for support and guidance, and they have been very understanding and willing to help me. I would tell any female engineering student to not be discouraged. There is a great engineering support system of women out there, and even though we encounter challenges during engineering school, we can be a part of the solution and help other women overcome the challenges we overcame.

Q: *What advice would you give the freshman version of yourself?*

A: As an engineering student, you will have challenging and exhausting nights. When you go through these, remind yourself that **the next four years will determine the next 40 years of your life,** and keep going.

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EXTREME TIME MANAGEMENT

with Gogol Bhattacharya

Gogol graduated from BCOE in 2018 with both a bioengineering and electrical engineering degree. While he was a student at BCOE, he held various research positions and contributed to a published research paper. He was also an undergraduate student instructor for a machine learning class put on by the electrical engineering department.

Q: *How did you become interested in engineering?*

A: I really became excited about engineering in middle school when I joined my school's LEGO robotics team. I also started learning programming at around this age, which further increased my interest in engineering.

Q: *Why did you choose to take on two engineering degrees at the same time?*

A: I think the purpose of engineering is to solve complex problems. The more tools I have to help me solve those problems, the more effective I will be as an engineer. I see each class that I take as an extra tool that I can add to my tool belt. In addition to the double major, I also have taken extra programming and math classes. They are interesting to me and one day I may be able to leverage this knowledge to solve complex problems.

Q: *You mentioned that you take between 20 and 24 units every quarter to pursue both engineering degrees. How do you handle that workload?*

A: In order to handle the workload, the main thing I focused on was minimizing the amount of time that I spent on each assignment. I realized I was spending countless hours trying to figure out problems that I was stuck on. To save myself from this wasted time, I developed a strategy where I would start an assignment and go through all of the problems I could do fairly easily. The second I get stuck on a problem, I switch to a different assignment. I keep doing this until all the simple problems on my assignments are done. Then

I work on the harder problems either in office hours or with my study group in order to get through them faster. This strategy saved me a significant amount of time and allowed me to take on a heavier workload.

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CREATING A VIBRANT SOCIAL LIFE

with Augie Montelongo

Augie Montelongo is a senior mechanical engineering student at BCOE. He is currently the Chief Engineer for BCOE's Aerospace System, and has served as a project manager for The American Society of Mechanical Engineers (ASME) and Society of Automotive Engineers Aerospace (SAE Aero) at BCOE. He also has been a member of BCOE's Battlebots team and the BCOE Rocket Project.

Q: *Give us a little bit of background about yourself, and tell us about the biggest challenge you have encountered thus far as an engineering student.*

A: I lived in Mexico for the first 12 years of my life. When I turned 12, my family migrated to the United States, and I entered the 8th grade at a school near Riverside. After I completed high school, I decided to come to UCR because I felt the professors here genuinely cared about the success of their students. It seemed like a place where I would be able to succeed and realize my full potential as an engineering student. My biggest challenge in college so far has been finding the time to take on all the projects that I want to be involved in, while simultaneously maintaining high grades and enjoying the college experience. As an engineering student, it has been a challenge to find a balance where none of these areas of my life suffer.

Q: *You've always had a very vibrant social life even though your schedule is packed with so many other commitments. What are some of the "life hacks" you use which allow you to do that?*

A: I treat my social life just like any other commitment. I have a specific amount of time each week that I schedule in my Google calendar that is allocated to being social. For example, during my sophomore year I would get together with friends every Tuesday. We would go to a local taqueria to take advantage of the Taco Tuesday reduced prices. However, my social life is a little bit different now. I no longer do Taco Tuesday every week, but I have pre-scheduled time in my Google calendar each week for being social. Organizing my social life in this way has decreased my stress a lot, because I no longer have to worry about when I will have time to be social.

Everything is already pre-scheduled. It gives me something to look forward to each week and helps me to avoid burning out.

Q: *Are there any other ways you avoid burning out as an engineering student?*

A: Being involved with engineering projects and getting real hands-on experience has helped me to stay motivated as an engineering student. When I am overloaded with assignments and am experiencing a tremendous amount of stress, I always ask myself why I chose this career path. I really enjoy the projects I work on, so I tell myself that doing well in school will help me to earn a degree so I can spend my career working on projects like these. Classroom assignments are often somewhat monotonous and boring, but projects allow me to explore the world of engineering in a more engaging and exciting way. This helps me to keep my focus on the light at the end of the tunnel.

Q: *Do you have any advice for the freshman version of yourself?*

A: I would tell my freshman self to spend time getting to know my professors. This not only helps you build connections for your career, but also helps you learn more efficiently. It is sometimes difficult to really get a good grasp of the material in a class if you only learn from the lectures. If you go to office hours, the professor will tailor the material to better fit your learning style.

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LEADERSHIP LESSONS FROM UCR'S SOCCER TEAM CAPTAIN

with Kyra Taylor

Kyra is a fourth-year bioengineering student at BCOE. She overcame not initially being recruited as a high school athlete to become the captain of UCR's women's soccer team. Through soccer she has discovered she loves being around people, and she wants to have a bioengineering career that will allow her to directly impact other people's lives.

Q: *What was your journey like to becoming both a student athlete and a bioengineering student.*

A: My older sister and I both started playing soccer at around the age of 5, because our parents really didn't like the idea of us sitting around the house. I played competitively for years, but wasn't recruited by any colleges until midway through my senior year of high school. After performing well in a few different tournaments, I received an offer from UCR to play soccer for them, and four years later I am now the captain of the soccer team. I decided to pursue bioengineering as well because I wanted a career where I could increase the quality of life for people around the world.

Q: *As a team captain, what would you say are some of the leadership strategies or techniques that you use to motivate or inspire your team?*

A: I think the number one thing I realized is that as a leader, you are constantly under the microscope. It is sometimes difficult to gain respect from your peers, especially if they are older or more experienced than you. The only way I have been able to do this successfully is to lead my team by example. My team will not make an effort to work hard, stay in shape, and have a good attitude if I don't do the same.

Q: *Do you ever experience imposter syndrome as a leader?*

A: I sometimes struggle with feeling like I am unworthy of people looking up to me. I think most people deal with a little bit of imposter syndrome, but one thing that has helped me is telling

myself why I deserve the position I am in. I constantly remind myself of what I have done to earn my position, and this helps with my confidence considerably.

Q: *How do you handle learning all of the material for your classes when you're on the road instead of in lecture?*

A: Although I am not always able to make it to class, I rely on the other resources I have for learning. I use the notes that are posted online, ask my classmates for their notes, read the textbook, attend office hours, and use YouTube tutorials. It is my responsibility to learn the material, so I do it any way that I can.

Q: *How do you stay balanced while having so many heavy responsibilities?*

A: I am able to stay relatively calm and balanced under the pressure of my responsibilities because I spend countless hours preparing for them. For example, if I have a large test coming up in a few weeks I will start studying for it a few weeks in advance. To prepare for being a leader on the field, I will often do extra workouts and drills to make sure I am in peak condition. I also write notes to myself to help keep focused and motivated. When I have a busy day coming up I will often write encouraging messages on posted notes and put them on my wall so I see them when I wake up. This has helped me stay positive during college.

Q: *How do you relax? How do you refresh yourself?*

A: I don't do it enough, honestly. But when I get a chance, I like to go to the student rec center and take a yoga class. Sometimes when I get frustrated, I like to go run to get out all of the stress and frustration. I've also realized that watching Netflix for a few hours, while entertaining, is not very beneficial to me for relaxing. I need to have everything off. Just lying in the bed for 20 minutes in silence really helps refresh me.

Q: *If you had the opportunity to talk with the freshman version of yourself, what advice would you give her?*

A: I would tell my freshman self to make sure and take the time to enjoy the process of learning, and being on the soccer team. There is a lot of pressure that comes with being both an engineering student and student athlete. At times I have been overly serious about soccer and school, and I envied players from other teams that seemed like they were having a lot more fun. I would also tell myself it's okay to have confidence in myself. It's ok to believe that I am capable. Ultimately, I would tell myself to enjoy and make the most out of college, because it won't last forever. You want to make sure that when you walk away, you did it the right way

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LANDING FIVE INTERNSHIPS

with John Pham

John Pham is a fourth-year computer engineering student at BCOE with a laundry list of impressive accomplishments. He has had five internships at companies that include JPL, AT&T, the Aerospace Corporation, and Amazon. Additionally, as an undergrad he has held both research and teaching positions at BCOE. He also has a tremendous amount of volunteer and leadership experience at BCOE, and prides himself on being a community builder.

Q: *What motivated you to pursue engineering?*

A: In high school, I wanted to be an art major. When the time came to apply to college, I got into a few art schools. However, after discussing it with my parents I decided that it would be better for me to pursue my other interest, which was engineering, and make my art endeavors a hobby. I came into UCR as a mechanical engineering major, but soon switched to computer engineering after experiencing Citrus Hack. I fell in love with hackathons because they provided an environment where I could use my creativity to build whatever I want, while also learning very relevant skills for industry.

Q: *It seems like you know exactly what you want to do with your career, but how did you get to that point?*

A: I honed in on what I wanted to do with my career during my freshman year. In this year, I went to as many hackathons as I could. They were all within two to three hours of UCR, and I enjoyed spending my weekends learning new things in an environment where there were hundreds of people doing the same things. Hackathons are a great place to experiment and find out what you enjoy doing. Also, all of these hackathons were incentivized with prizes from different sponsors. These sponsors are usually engineering companies. I know people who have landed internships just by impressing these sponsors with their hackathon projects.

Q: *Do you think hackathons are useful for people that aren't computer engineering majors?*

A: Yes! Although they tend to be geared toward niche majors

like computer engineering and electrical engineering, I think that anyone could benefit from the skills you learn at hackathons. For example, if you are a mechanical engineering major, you probably have not developed strong programming skills in your classes. At a hackathon, you have 24 to 36 hours to work on a project that will help you develop your programming skills, which could potentially open up new opportunities for you in different industries like robotics.

Q: *What is your strategy for finding internship opportunities?*

A: The first internship is usually the hardest one to get, because students generally do not have a huge amount of experience on their resumes when searching for their first internship. At this stage, applying blindly online is usually not the most efficient way to land an internship. You will have a much better chance of landing an internship if you speak with a recruiter in person.

I landed my first internship as a freshman at NASA's Jet Propulsion Laboratory by talking to a recruiter at a career fair. I did research on all of the companies that were going to be at the career fair beforehand and wrote notes on each company in my padfolio I took to the fair. It is important to appear knowledgeable about the companies you are speaking with at career fairs. You should never ask the companies what they do. Instead, you should explain to the recruiters what you like about their company and how you would be able to contribute to their mission. For example, when I approached the NASA recruiter, I said something like, "Hi my name is John. I am really excited about NASA's asteroid exploration robotic spacecraft project and how it utilizes so many emerging technologies to complete its mission. In fact, I worked with similar technologies at my research position here at UCR." I also

apply to all of the companies I plan on talking to before I go to the career fair.

Last, don't worry if you don't meet all the requirements for the jobs or internships that you are applying to. Some people become discouraged and end up not applying at all. Apply to as many internships as you can while gaining experience outside of the classroom and before you know it, you will have an internship.

Q: *How did you land the research position you had as a freshman?*

A: The contact information for all the UCR engineering professors is online, so I sent an email to all of them saying, "I'm a freshman engineering student, I'm interested in doing undergraduate research. Can I meet with you next week to talk about possible opportunities?" Out of about 300 professors, three got back to me and I picked one of them.

The research symposium is also a great way for students to land research positions. It usually happens twice a year. All the professors who are currently looking for students to work in the labs attend this event and look for potential recruits. It is essentially a job fair for research positions.

Q: *What is your motivation for taking on so many projects?*

A: In school we have to pay in order to learn and earn a degree. I wanted to find a way to "flip the script" and get paid to learn. That was the big motivator for me. I knew if I landed an internship or research position, I would be able to have fun learning while also getting paid.

Q: *How do you organize your schedule to stay on top of all of your responsibilities while maintaining high grades as an engineering student?*

A: I treat my classwork as if it were a “9-to-5” job. During my freshman year I told myself that if I can work productively on school work, club work, and any other school-related work between the hours of nine and five, then I can use the rest of the day to do whatever I want. So instead of procrastinating throughout the entire day, I have a specified amount of time where I am laser-focused on work, and then I treat my extra free time as a reward. Every night I update my Google calendar with the tasks I need to get done the next day, and I estimate the amount of time each will take to complete. This way I will know exactly how much work I will be getting done during the hours of nine to five.

Q: *How do you relax?*

A: In the morning I like to meditate. It's a way to focus on myself at the very start the day, and it also boosts my motivation. If you meditate first thing in the morning, you've already accomplished one thing which gives you momentum to accomplish the rest of your tasks throughout the day.

6

DEVELOPING YOUR SOFT SKILLS

with Cindy Quach

Cindy Quach is a third-year information systems and business student at BCOE. She has held internships at companies such as Goldman Sachs, Thin Film Electronics, and Salesforce. Additionally, she is heavily involved with several engineering clubs at BCOE, serving as marketing director for Citrus Hack and participating as a member of Women in Computing with the Association for Computing Machinery (ACM).

Q: *What was your journey like to where you are today?*

A: I really became interested in technology in high school. This was around the time I landed a technology and product development internship with the company Salesforce. I really struggled that summer, because I was assigned to a programming project even though I did not know anything about programming. I spent most of the summer on Code Academy trying to teach myself how to program. Surprisingly, through this experience I discovered I really enjoyed computer science. This influenced me to choose business information systems as my major, because I wanted a job where I could be in a technology-centered environment, while also being able to spend a lot of time interacting with coworkers and clients.

Q: *What do you think are the things that have helped you land so many positions?*

A: That's a good question. I've interviewed for quite a few positions, and I've been told numerous times that the manager wants to hire me because they think I will fit the culture of their team. They are not only looking for someone who has perfect technical skills; they are also looking for someone who can work well with people who are very different from themselves. I think the soft skills that I demonstrate during these interviews show that I am a likeable person, and I can work well with anyone.

Q: *How did you develop these soft skills and social skills?*

A: I am pretty outgoing and sociable a majority of the time, but there are also times where I can be fairly introverted. Becoming

involved in ACM's Women in Computing has really helped my professional soft skills. As an active member in these organizations, I am constantly talking to and collaborating with other people, which has really helped me to be less nervous when I am in an interview or professional setting. These soft skills are not necessarily taught in the classroom. But if you are a good communicator and can work well with others, you will be much more attractive to companies, and will probably land management positions faster. Also, being a part of these clubs has not only helped me develop my soft skills, but they have also allowed me to meet some of my closest friends.

Q: *How do you avoid burnout as a college student?*

A: I feel there are a tremendous amount of opportunities here at UCR. Whether it is taking on a new research position, or being a board member for a club, it is sometimes hard for me to choose what I really want to work on with the limited amount of time I have. I allocate my time based on my values. I personally really value investment into my long-term career, staying active, getting good grades, and my mental health. I know that I am balanced when I have something in my schedule that is working towards each of those priorities. For example, I meditate regularly, which helps maintain my mental health. I am heavily involved in the engineering clubs, which help with my long-term investment in my career. I go to the gym regularly, which helps me stay fit. wo earn high grades. If I am overwhelmed and feel as if I need to drop something from my schedule, I choose something that is not working towards any of those four things. This strategy has served me well, and has helped me stay sane and balanced as a college student. The hard part is determining the things you truly value.

Q: *You were the marketing director of Citrus Hack. Do you have any “life hacks” or advice for leading, inspiring, and motivating a team?*

A: I was actually terrified of taking on the role, because before that I had never formally led a team. I remember not being able to sleep because I was worried about how I was going to get the courage to direct others. However, the marketing team was the most productive and close-knit team for Citrus Hack that year. One of the things that helped us to be successful was that we developed a close-knit friendship with each other, more than just small talk. We all became really good friends outside of work, which helped us understand each other better to effectively market Citrus Hack.

Q: *You mentioned that you got your Goldman Sachs internship at a networking event. How do you approach networking situations like these?*

A: Sometimes I get nervous in networking situations. I mitigate this anxiety by telling myself that even I don't get an internship or make any connections at this event, everything will still be okay. This helps me relieve myself of any pressure, and I'm able to have more organic and relaxed conversations. Also, I've had both good and bad networking experiences, and I've realized the bad ones were when I went in with the intention of getting an internship. Doing so leads to inorganic and robotic conversations that don't lead anywhere. I get much better results if I go in with the goal of getting to know the recruiter. I try to find out what they do at their company, how they got to that position, and what they love about their company. Everyone enjoys talking about themselves, so this approach really

helps make the conversation more enjoyable for the recruiter, and makes it more likely that they remember you.

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LANDING RESEARCH POSITIONS AT OTHER COLLEGES

with Gustavo Correa

Gustavo Correa is a fourth-year electrical engineering student at BCOE. He has held research positions at UCR, MIT, and UC Berkeley. Gustavo has also had two engineering internships, and has served on the board of UCR's Institute of Electrical and Electronics Engineers (IEEE) club. Additionally, he has won numerous awards at various hackathons throughout the United States.

Q: *What motivated you to pursue engineering?*

A: Starting from a young age my dad and I would spend a lot of time together designing and building things for our home. This could be anything from a tool shed to a greenhouse for our garden. These projects helped me discover that I loved building things with my hands. I wanted to find a career where I could use my love for creating things to make an impact in society.

Q: *How did you land your first internship as a freshman?*

A: Towards the end of my first quarter at UCR, I found an internship at a local company I wanted to apply to, so I put my resume together. That quarter I completed a project at Citrus Hack, and also became involved with a few of the engineering clubs. I added these experiences to my resume and applied to this internship. Even though I was a freshman, the company saw my initiative and after interviewing me they decided to give me a shot.

Q: *You mentioned the IEEE mentorship programming also helped you land this internship. How did it help?*

A: Honestly if it weren't for my student mentors, I might have not gotten that internship. They told me exactly what I needed to do to land an internship and how to present myself in a professional way during the interviews. I also have another mentor that is an engineer in industry. Having mentors who are in industry is like seeing yourself in the future. They give you a good idea of what you should be working on and what it is like to be an actual engineer.

Q: *What was your role at MIT?*

A: I was a summer research intern at MIT. Specifically, I worked in MIT's media lab. The lab focused on taking researchers from different fields and working on interdisciplinary projects. I helped the professors with their research, but I was also very focused on making as many connections as possible while I was there. I reached out to as many engineers as I could from MIT and surrounding companies, so I could understand what they did to help me further narrow down what I want to do.

Q: *How can students find research and internship opportunities at other colleges and universities?*

A: Numerous high-profile colleges offer summer research positions and internships that undergraduates from other colleges can apply to. If you google, "UCLA internships for undergraduates" or "MIT internships for undergraduates," a list of opportunities will appear. This strategy can work for almost any university.

Q: *You mentioned that you had another research position this summer at UC Berkeley. How were you able to land that additional research position?*

A: After I finished up my research at MIT, I went out to the Bay Area to visit a friend. I was only planning on staying there for a week, but I wanted to make the most of my time while I was there. I reached out to people at Silicon Valley companies and the surrounding universities through LinkedIn. I came across a professor from UC Berkeley who does similar research to the what

I do at UCR. I reached out to him and asked if we could have a lunch meeting. After talking to him for a few hours at our lunch meeting, the Professor invited me to spend the rest of my summer in his lab. The only reason that any of this was possible however, was because I made a conscious effort to talk to as many interesting and knowledgeable people that I could during the summer.

Q: *How do you unwind and relax?*

A: I'm taking piano lessons. Playing the piano really helps me get my mind off of work. I think everyone should find a productive hobby, because going to college is not just about your professional career or learning the tools you need for a job; it's also about becoming a well-rounded person.

Q: *This is your third year in college. Looking back, is there anything that you would've done differently?*

A: I would focus on doing my homework on the first day it's handed out, because it takes time to digest the material. This past weekend I started a homework assignment and I didn't get past the first problem because there was so much background material I had to read before being able to complete any problems. Additionally, I would focus on doing more internships. You don't need a crazy amount of experience to get one. I learned a lot from my internships and they opened my mind to a lot of new and exciting ideas.

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GET HIGH GRADES WITHOUT STRESS

with Timothy Lam

Timothy Lam is a senior mechanical engineering student at BCOE. He has served as the president of The American Society of Mechanical Engineers (ASME) and has held three different engineering research positions. In addition, he was a mechanical engineering intern at Rockwell Collins, and serves as the Vice-President of the Tau Beta Pi engineering honors society.

Q: *How did you land your research position as a freshman?*

A: I felt intimidated to take on engineering projects and research when I came in as a freshman because I felt like I was not knowledgeable enough yet. This changed when I found a mentor in the ASME mentor program. He not only gave me great advice on how to navigate college, but he also helped me land my first research position. Since he was three years ahead of me, he had a much larger engineering network than I had. He introduced me to one of his friends who also was a graduate student in an engineering lab. After talking to the graduate student about my interests for a few hours, he invited me to meet the professor of the lab, and I ended up landing a research position in his lab.

Q: *How did you land your internship with Rockwell Collins?*

A: I spent a tremendous amount of time looking for a summer internship during my junior year and actually ended up applying to about eighty different internships. Out of those eighty applications I received four callbacks and two internship offers. Getting an internship from online applications is really just a numbers game. You need to apply to a massive amount of internships if online applications are your main job hunting medium.

Q: *You have an extremely high GPA. What strategies do you use for studying?*

A: One strategy that is not emphasized enough is breaking up an assignment into smaller chunks. For example, when I interned at Rockwell Collins, I worked on a control module for a plane and

my manager split it into different sections and gave each section to a different engineer. A homework assignment can be completed in a similar way. If I have a homework assignment that is six problems long, I will do one problem a day for six days which makes the work much less stressful and tedious. Sometimes when I have a lot of material to learn, I will get together with a couple of friends and split up the work. Each person will master a portion of the material and then we will all come together and teach each other what we learned. I also put all my exams, project deadlines, and homework deadlines into my Google calendar as soon as I find out about them. I do this so I can visually see how much time I have to prepare for my exams and can schedule study time accordingly.

Q: *How do you keep your motivation high?*

A: My dream job is to be an aerospace engineer at Boeing. Focusing on my end goal helps me stay motivated, because I know I am currently learning the skills that will allow me to be an effective engineer at Boeing in the future.

Q: *How do you relax? How do you de-stress?*

A: I find it very beneficial to have both engineering and non-engineering social groups. I am a member of a few non-engineering related clubs. I find it relaxing to explore other things that I am interested in, because it gets my mind off of work. Additionally, I believe it makes me a more well-rounded person.

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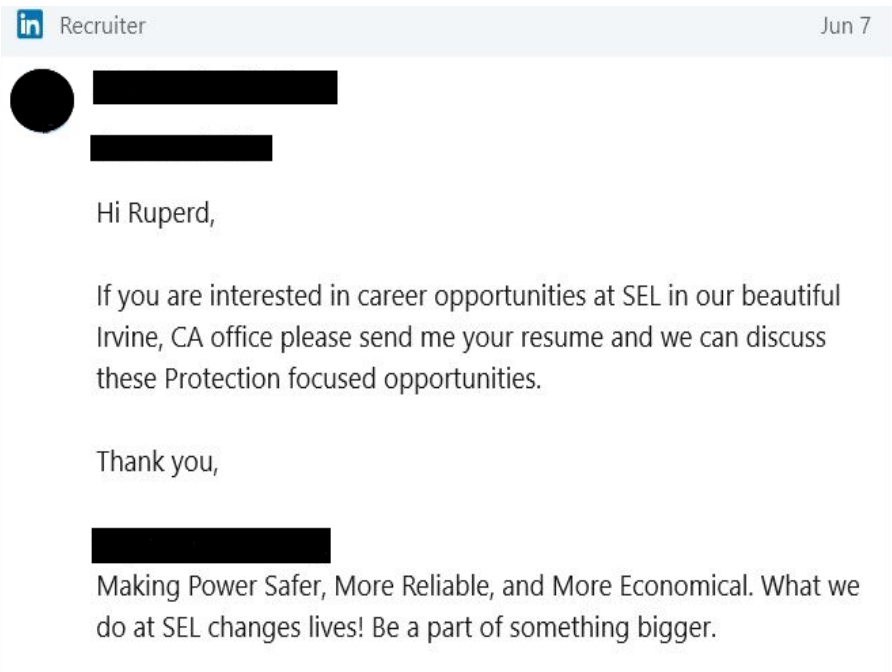
DOMINATE ENGINEERING SCHOOL

with Ruperd Wilson II

Ruperd Wilson II is a fourth-year electrical engineering student at BCOE and the author of this book. He was inducted into the Tau Beta Pi honors society in his senior year. He has held internships at Southern California Edison and the Office of the President of the University of California. During his senior year he also worked for a local startup as a sales engineer. He will be working at Raytheon following graduation. Ruperd is passionate about using his talents to better the lives of others.

Q: *How do you find internships and job opportunities?*

A: I don't limit myself to the career fairs at UCR. I also attend job fairs at other universities and on site at different companies. Many engineering companies hold job fairs at their company headquarters, and you can easily find out about them by searching online. I landed my job at Raytheon by going to a career fair like this, and I have friends who have landed jobs at companies like Boeing, Northrup Grumman, and Genentech by using the same strategy. It is also extremely important to have a polished LinkedIn profile. I have received messages from recruiters on LinkedIn about interview opportunities just because they came across my profile and liked what they saw.



In addition, there are several programs like the INROADS program and the Code2040 program that help engineering students find internships. These programs use their industry connects to make it easier for their

students to get interviews. During my sophomore year, I participated in the INROADS program. They connected me with a few different employers and helped me land an information technology internship for the summer.

I landed my current college job by using a LinkedIn strategy. At the beginning of my senior year, I looked for companies in the Riverside area that were working on projects I found exciting. I found a small start-up in Ontario that manufactures engineering equipment and wrote a letter to the chief executive officer. The letter mentioned almost nothing about myself, but detailed why I found the company exciting and why I thought what they were doing was important. I sent this letter to the CEO on LinkedIn and it helped spark an ongoing relationship. After a few months of speaking with the CEO about his company and our common interests, I sent another letter that detailed my technical and management experience and described how I thought I could add value to his team. He sent me a prompt response and offered me a job to work as a technical sales employee for the rest of the school year.

Q: *How do you find a balance between work, extracurriculars, and academics as an engineering student?*

A: I have adopted the philosophy of having at least one event on my calendar each month that I can look forward to. This helps me stay motivated to finish all my tasks because I know there will be a reward at the end. I also consistently meditate and exercise. These activities both serve as escapisms for me, help get my mind off work, and help me maintain a healthy body and mind. Another thing that helps me stay balanced is studying with friends. When I study with a group of friends, I maximize my productivity by getting social interaction and studying done simultaneously. My life is not always perfectly balanced

and stress-free. I know sometimes I will have to allocate essentially all my time to classwork, or towards a project. If imbalance in my life is temporary, I am ok with it.

Q: *What was your strategies to maintain high grades?*

A: I do best in school when I am going to office hours consistently. During my freshman year, I would sometimes do my homework entirely in office hours because I knew that I could finish the homework more efficiently if the TA was sitting right next to me. I would ask the TA a question as soon as I got stuck.

Q: *What are your biggest takeaways from writing this book?*

A: I learned that there are many creative ways to finding internship and research opportunities. Applying online works, but it is helpful to utilize other interactive strategies to land opportunities faster. More specifically, I learned that LinkedIn is one of the most powerful and underutilized tools for landing jobs. I also learned it is possible to handle a large workload with minimal stress if you take the initiative to execute the work in a strategic manner. These strategies can consist of splitting up your homework into smaller assignments or relying on office hours and study groups to finish homework quicker. Lastly, I learned it is possible to find a comfortable balance as an engineering major by being intentional about spending time with friends, as well as doing things to maximize your mental energy, like working out and meditating. Overall, I learned it is possible to have an amazing, successful, and fun undergraduate engineering school experience.



FAMILY ROOM
ELEVATIONS
WALL EXIST

7'-0"

CL

CL.B.

EXIST. WALLS

LOFT (EXIST. WALLS)

BM 4

BM 2

9'-5"

EXIST. WIND HEADS TO BE SUPPORTED

7'-4" W.D.

EQ.

7'-0"

EXIST. WALLS

EXIST. WIND HEADS TO BE SUPPORTED

EXIST. WIND HEADS TO BE SUPPORTED

EXIST. WIND HEADS TO BE SUPPORTED

EXIST. WIND HEADS TO BE SUPPORTED

EXIST. JOISTS

BEDROOM