Nicholas Won

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Education

University of California, Santa Barbara — *Santa Barbara, California*
B.S. Mechanical Engineering — *Sep 2017 - Jun 2021*

Imperial College London — *London, England*
Year Abroad — *Sep 2019 - Jun 2020*
Duttenhaver & UC EAP Scholarship Recipient

Coursework/Skillset

Thermodynamics, Fluid Mechanics, Mechatronics, Heat Transfer, Materials in Engineering, Vibrations, Structural Analysis, Engineering Project Management, Advanced Materials, Machine Design, Solidworks, Mechanical Engineering Design, Java, Python, Matlab, SwiftUI, Firebase, Excel. Powerpoint, Word, Google Suite

Work Experience

Capital One — *Richmond, VA*
Process Manager, Management Rotation Program — *July 2021 - Present*
- Working cross-functionally between tech teams and customers to deliver a product estimated to save $60k in labor hours
- Increasing the efficiency of internal workflows using business process management strategies
- Delivered a process improvement to internal customers that resulted in 90% better efficiency and a reduction of hundreds of hours of delay

Amazon — *Virtual (Covid-19)*
Operations Area Manager Intern — *June 2020 - Aug 2020*
- Developed, presented, and delivered a PR/FAQ focused on improving the efficiency of Amazon inbound and outbound processes
- Modified a current operations process for a maximum 97% decrease in turnaround time
- Participated in daily case studies, intern discussions, and leadership development activities

Lumentum — *San Jose, CA*
Process Engineering Intern — *June 2019- Sep 2019*
- Improved manufacturing processes of Gallium Arsenide wafers resulting in a more stable and clean reactive ion etch
- Performed time studies identifying process bottlenecks, thus improving wafer fabrication for manufacturability and yield improvement
- Used scanning electron microscope to identify weak points in wafers, resulting in process improvements to address said weaknesses
- Developed and qualified III-V semiconductor laser wafer fabrication processes
- Conducted process capability analysis, failure mode analysis, DOE, and SPC review for continuous improvement
- Used SEM and EDX to conduct analyses inside of a level 1000 cleanroom

Underwriters Laboratories — *Fremont, CA*
RF Quality Assurance Intern — *June 2018 - August 2018*
- Consulted for Apple to certify iPhone XS, XS Max, and XR before release; project completed two weeks ahead of schedule.
- Tested RF radiation and specific absorption rates (SAR) against FCC regulations for Apple to ensure the safety of the public
- Developed working knowledge of the SAR testing methods, instrumentation, and systems
- Communicated with customer during setup and operation to ensure that needs were being met successfully and proper evaluation was carried out
- Learned how to efficiently operate Dosimetric Assessment Systems and wireless call boxes

Projects

Remote Sea Power Generation - UCSB, Navy, DOE Capstone — *Santa Barbara, CA*
Project Lead & Product Manager — *September 2020 - June 2021*
- Collaborated with the Navy and Department of Energy to develop a product vision, strategy, and roadmap for a self contained subsea power unit
- Lead a cross-functional team of six mechanical engineers and business majors at UCSB
- Managed project deadlines, objectives, deliverables, and $26,500 budget
- Developed multiple iterations of prototypes involving electrical and mechanical systems with a combination of CAD, structural analysis, machine design

Splink — *Danville, CA*
Founder/Creator/Developer — *June 2020 - Present*
- Creating and building an upcoming professional social media platform on Google Cloud Platform
- Developed working prototypes with SwiftUI and GCP Firebase/Firestore NoSQL database
- Implemented a secure authentication for user sign up and sign in with email

Where In the World Alexa Skill — *Danville, CA*
Lead Developer — *July 2018 - Present*
- Developed a fun and exciting geography quiz game made for the popular Amazon Alexa Platform
- Created intents and functions within the application/skill for users to interact with
- Developed using python, JSON, and Amazon Alexa API's
- Currently available on Amazon's Alexa skill store