Mukund Mauji

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Education

B.A.Sc Mathematics and Engineering (Systems and Robotics) | Queen's University

Class of 2020

Awards: 125th Anniversary Engineering Excellence Award, Excellence Scholarship, Science '68 Scholarship

Experience

Hardware Engineer | Cisco Meraki

San Francisco, USA | May 2019 - Sept. 2019

- Led the research and validation stages of a new product for the camera line, Meraki's fastest growing product line
- Performed field testing and wrote a report to illustrate competitive advantages of product in various situations
- Compiled all necessary information to write a Parts Requirement Document (PRD) to kickoff the project
- Completed hardware debugging to help solve motor issues

Business Technology Analyst | Deloitte

Toronto, Canada | May 2018 - Sept. 2018

- Implemented facial recognition technology to recognize and save faces to a database using a Raspberry Pi and camera
- Developed modular application (Python, OpenCV) for real-time classification and model retraining
- Established databases using AWS DynamoDB to upload model data for higher-characteristic trait analysis
- Designed application development under ongoing client needs and collected user requirements

Engineering Tutor | EngLinks

Kingston, Canada | Nov. 2016 - Present

- Tutored extensively one-on-one and in small groups, both in ongoing and single-topic sessions
- Prepared and delivered exam prep workshops for 60 100 people
- Subjects: Calculus I/II, Linear Algebra, Intro to Programming, Engineering Graphics, Math and Science (Gr. 10 12)

Extracurricular activities

Co-Chair | QHacks

Kingston, Canada | Apr. 2019 – Present

- Oversaw the planning and execution of Queen's fifth annual hackathon
- Maintained and grew relationships with strategic and community partners, raising a budget of over \$120,000
- Hired and led the 27-person executive team
- Worked with all subteams to solve problems in order to achieve common goals

Co-Chair | Queen's Engineering Competition

Kingston, Canada | Apr. 2018 – Apr. 2019

- Worked in collaboration with a co-chair to coordinate and plan all aspects of a \$30,000 engineering competition
- Hired and managed a team of 20 members to organize the event, introducing agile methodology to streamline efficiency while applying organizational behavior principles to uphold team morale
- Implemented 5 new competitions, increasing the number of events by 300%, and attracting over 200 delegates

Projects

Haskap Berry Harvester

Oueen's University | Jan. 2017 - May 2017

- Designed and built a berry harvester prototype for a 2-acre farm within physical, financial and design constraints
- Researched existing and upcoming harvesting technologies extensively to determine their strengths and weaknesses
- Determined final solution from multiple choices using weighted evaluation matrices based on design criteria
- Created 3D models and 2D views of several versions of the harvester using SolidEdge
- Compiled all results into a 20-page report detailing the process, implementation methods, all previous iterations and all supporting research

ConUHacks II

Concordia University | Jan. 2017

- Created a Twitter bot during a 24 hour hackathon; the bot parsed the tweet for the name of a commercial product and responded in real time with its nearest retail location
- Used a NodeJS server that communicated with Yellow Pages and Twitter APIs to respond to tweets containing a specific hashtag

Skills

Languages: Hindi, French, Spanish

Programming: Python, Dynamic HTML, Latex, MATLAB, C