JEREMY CHEUNG

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in jeremycheung111

OVERVIEW

Software: Solidworks, CATIA, AutoCAD, Python, SQL, UNIX, C multi-threading (POSIX), MATLAB Simulink, LabView, AWS, Selenium, Eclipse, Fortran 96

Hardware: Arduino, Omron PLCs, PCB development, 3D Printing Technologies, Lathe and Mill, CNC Machining, NXTCam V4

Certifications: Certified Solidworks Associate

- Well versed in designing mechanical components for consumer electronics using both plastic and metal, from conception to mass production
- Experience working in multi-disciplinary teams with both technical and non technical staff

EDUCATION

RYERSON UNIVERSITY – Toronto, ON   2014 - 2019

Mechanical Engineering | Bachelor of Engineering *B. Eng*

Specialization in Mechatronics

Eligible for Professional Engineers Designation *P. Eng,* apart of the Engineer in Training *EIT* program

WORK EXPERIENCE

Scandinavian Health Limited Group – Taoyuan, Taiwan   May 2018 – Aug 2018

Mechanical Engineering Internship

- Designed and built prototype mechanical assemblies averaging 1-3 new concepts per week for autoinjector plastic components using Solidworks and AutoCAD
- Analyzed and optimized prototypes of mechanical designs from external suppliers and collaborated with manufacturers to meet quality control guidelines set by the FDA and ISO standards
- Collaborated with multi- disciplinary team comprised of engineers, quality management staff, and assembly workers to resolve heat dissipation and component spacing design problems

Honda Canada - Alliston, ON   May 2017- May 2018

Assembly Engineering Internship

- Designed and Implemented assembly line test fixtures using 3D CAD (CATIA) that eliminated ergonomically straining process and led to a reduction in process time by 15 seconds
- Engaged closely with contractors, suppliers, and designers from project conception to end of life cycle to build safety stations and stops around the assembly line and alleviate production safety issues
- Conducted test failure and tolerance analysis using statistics to pinpoint engineering design flaws or safety design flaws within manufacturing plant to alleviate production issues
- Redesigned new pneumatic control systems and equipment to improve safety and associate comfort, utilizing heavy machinery within a high volume mass production facility

Ryerson University Department of Mechanical Engineering – Toronto, ON   May 2016- May 2017

Research Assistant

- Specialized in computational fluid dynamics to analyze non-newtonian fluid flow on multiple lattice test cases using the Lattice- Boltzmann method
- Designed and built a custom CO_2 heat pump for a university testing facility, worked closely with vendors and suppliers to acquire appropriate parts and design

PROJECT EXPERIENCE

Portfolio Website – Personal Project, Toronto   April 2020 – Present
- Using HTML, CSS, JS, Git and Heroku to write and deploy a fully functional static website to develop programming skills and also increase internet outreach
- Used python and Django to build a dynamic website mimic, deployed on a local server to test new features and website usage tracking

Web Scrapping and SQL bot – Personal Project, Toronto   Sept 2019 – Dec 2019
- Developed a bot using Selenium and Python that would search the web for relevant job titles and export the job postings to a centralized database where users can look at only relevant job postings
- Implemented custom web scraping bots for job boards (LinkedIn, Indeed) by unique identifiers using Eclipse, Python, Selenium and SQL
- Used python to build a job parser to extract repeating key words from job postings to increase chances of resume key word matching

AWS Enabled Robotics – Personal Project, Toronto   Jan 2019 – April 2019
- Created a program to operate a 3D printing robot arm able to move heavy objects or open doors
- Implemented Amazon Web Service Transcribe and S3 bucket APIs to run voice recognition software

Automated Sorting Robot – School Competition, Toronto   Jan 2018 – April 2018
- Configured NXTCamV4 Vision to detect colours and feedback to control servo movement from the arm
- Designed, prototyped and programmed a robotic arm using Lego Mindstorms and Arduino to operate in a confined testing location

VOLUNTEER EXPERIENCE

Roboyantrix – Markham, ON   Dec 2019 – Present
Counsellor
- Engaged with children aged 7 -12 regarding robotics and coding, using Lego Mindstorms EV3 and We-do to teach mathematics and engineering concepts
- Developed lesson plans and coached teams to prepare them for robotics competitions

AIESEC International Ryerson Chapter – Toronto, ON   Sep 2018 – May 2019
Outgoing Exchange Manager
- Responsible for the recruitment and preparation of interns for cross-cultural exchange and positive self- development for young people ages 18-30
- Hosted promotional events and information sessions for university students throughout the year
- Built international relations with other chapters around the world to scout opportunities for interns

Vision Youth Leadership Program - Markham, ON   2012 – 2017
Counselor
- Trained and educated teens in wilderness survival skills, physical activity and community service according to the *Duke of Edinburgh Award* Program Gold, Silver and Bronze Standards
- Organized public events and activities for 100-200 teens and parents to encourage leadership and personal development while utilizing interpersonal communication and project management capabilities