JEFFREY FENG

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SKILLS SUMMARY

- **Software /** Proficient in C++ and C#; familiar with Python, MATLAB, Git, R, MongoDB
- **Hardware /** Knowledge in SolidWorks, Arduino, Eagle
- **Application Development /** Practiced Android Studio, Linux, React.js, JQuery, HTML5, CSS, Jekyll, Drupal
- **Management /** Experienced in systems analysis, Agile, development models, JIRA, GitLab
- **Laboratory /** Implemented plastic and polymer processing at the University of Michigan

TECHNICAL EXPERIENCE

09/2018 - Present **Undergraduate Research Assistant,** Vision and Image Processing Group, University of Waterloo

- Completing a machine learning project on adversarial defense to improve image classifications
- Leveraging the PyTorch library to develop models to classify unrecognizable noise and perturbations

08/2018 - Present **Research and Development Engineer,** Esperto Labs (Student Design Team)

- Assisting in the creation of a user friendly wearable platform for biometric data collection
- Developing an efficient step detection algorithm in C that maximizes accuracy and reduces noise
- Completing rapid prototype testing on a SAMD21 microcontroller and a MPU9250

04 - 08/2018 **Front End Developer (Content Editor and Themer),** Ontario Institute for Cancer Research

- Assigned as the "Assistant Project Manager" to help the team to operate on over ten projects concurrently
- Efficiently edited and created static websites using HTML, CSS, React.js, JQuery, Jekyll, and Liquid
- Performed functional, accessibility, and user testing on Docker instances and MongoDB databases
- Implemented design components by evaluating products against user scenarios with InVision and converting the designs into tasks for the development team using OmniGraffle and Jira
- Assisted the project manager with assisting clients and analyzing and improving workflows of products

01 - 04/2018 **Electrical Team,** Waterloop – Canada's Hyperloop (Student Design Team)

- Used Eagle to build circuits, improving the modularity of the pod and reducing failure modes
- Ran simulations of magnetic wheel propulsion using MATLAB to optimize our propulsion systems

OTHER EXPERIENCE

09/2018 - Present **Teaching Assistant,** University of Waterloo

- Informal teaching assistant for first-year calculus in the Systems Design Engineering department
- Conducting large-scale help sessions, as well as assisting individuals on a more personal scale

EDUCATION

2017 - Present **Candidate for Bachelor of Applied Science - Biomedical Engineering,** University of Waterloo

- President's Scholarship of Distinction Shad Valley Memorial Engineering Scholarship, Lau Engineering Scholarship, First in Class Engineering Scholarship

06/2018 - Present **Online Courses:**

- Udemy - "Machine Learning, Hands-On Python & R in Data Science," "Deep Learning, Hands-On Artificial Neural Networks," "Modern React with Redux"
- Coursera - "Machine Learning – Andrew Ng," "Neural Networks and Deep Learning – Andrew Ng"

INTERESTS/HOBBIES

Interests: Medical imaging, machine learning, deep learning

Hobbies: Hackathons, game development, soccer, guitar