Mochamad Adrian Prananda

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Summary of Qualifications:

- **Area of Expertise**: full-stack software engineering, geospatial and image processing, and core infrastructure
- **Programming Languages**: Python, C/C++, Ruby, Java, JavaScript, TypeScript, Go, and MatLab
- **Web Frameworks and Tools**: Ruby on Rails, ReactJS, Electron, AngularJS, EmberJS, Flask, and Sinatra
- **Scientific and Processing Tools:** Scipy, Numpy, OpenCV, Pandas, Airflow, Celery, and Scikit-learn
- **Test Frameworks and Tools**: Rspec, Py.test, Mocha, and Enzyme
- **Data Management Tools**: PostgreSQL, MariaDB, MongoDB, and Redis

Related Experience:

Software Development Engineer, **4C Insights**, Seattle, WA | September 2017 – Present

- Serves highly active advertising statistics from various social platforms for big users such as Target and Ebay
- Transforms the legacy Ember.js-breeze.js to the new React-Redux frontend, increases responsiveness by 60 %
- Engineers the back-end system to serve millions of ad objects and statistics using Flask, MongoDB, and Celery

Software Engineer, **MicaSense Inc**, Seattle, WA | February 2016 – September 2017

- Developed a full-stack web application on Ruby on Rails back-end with AngularJS and ReactJS front-end
- Constructed a desktop uploader supporting up to 50,000 files per user using Electron and ReactJS
- Composed Python-based services and tasks with Docker, AWS ECS, and Airflow to process frequent incoming data
- Engineered the deployment workflow with Ansible and Terraform to easily scale up to 100 computing instances

Research Fellow, **Sensor Systems Lab**, **UW CS&E**, Seattle, WA | June 2015 – February 2016

- Developed an algorithm for a PR2 robot to grab objects by utilizing the electric field sensor on its finger tip
- Utilized Robot Operating System, Python, and C++ for the electric field sensor data acquisition process
- Worked with TI MSP430 and AVR Mega microcontrollers to develop a stereo algorithm using two OV7690 cameras

Teaching Assistant, **UW Electrical Engineering**, Seattle, WA | September 2015 – January 2016

- Led a team of researchers to develop a curriculum for the core embedded subsystems class at the UW (EE 472)
- Assisted 60 students with the fundamentals of embedded Linux on Sitara ARM Cortex-A8 processor
- Developed, administered, and corrected tests, labs, and homework in a timely manner

Software Researcher, **Dept. of Radiation Oncology**, **UW Medicine**, Seattle, WA | January 2013 – January 2014

- Worked on a project called smARtsKIN to develop a camera guidance system for patient positioning
- Utilized MATLAB and C++ for data analysis and to improve the software interface of the camera guidance system
- Created a simple 3D model of a linear accelerator with MATLAB for patient positioning simulation

Other Experience:

First Place Winner, **AngelHack – Capital One DevExchange Hackathon**, Seattle WA | March 2018

- Developed a budget splitting iOS application geared towards college students by using the Money Movement API
- Competed with 100+ developers all over Seattle to complete a 24-hour-window hackathon challenge

Education:

University of Washington, Seattle, WA | 2015 GPA 3.73/4.00

- BS in Electrical and Computer Engineering (focus on Embedded Systems) with a minor in Applied Mathematics
- Annual Dean's List for 2012-2013, 2013-2014, 2014-2015