James Wu

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Thanks for reading! I am a passionate, extremely driven software engineer with great interest in mobile applications, cloud computing, and real-time systems.

Education

University of Virginia, Charlottesville, VA — August 2014 - December 2017
BS Computer Science, with Distinction
Cumulative GPA: 3.56

Work Experience

Collins Aerospace, Sterling, VA — July 2019 - Present
Software Engineer, Flight Controls and Navigation

- Developing with the C programming language for the OSE real-time operating system targeting PowerPC architecture
- Implemented a mission load module for multi-processor communication via Ethernet
- Enhanced a mission load module to interface with an anti-jam antenna via serial connection
- Wrote Windows PowerShell scripts to automate and speed up load module testing
- Designed and wrote software test procedures for unit and integration testing

Capital One, Mclean, VA — February 2018 - July 2019
Associate Software Engineer, Small Business Tech/ Operational Engineering

- Contributed Java code to Centaur, the Small Business credit decisioning engine
- Built compliance APIs using Python, AWS Lambdas and DynamoDB for Bogie, the enterprise application deployment pipeline
- Developed widgets to Health Hub, an enterprise-ready compliance and security dashboard built using Django

Capital One, Mclean, VA — June 2017 - August 2017
Software Engineer Intern, Card Rewards

- Built the Rewards Earn Batch Fulfillment, an application that increments/decrements the rewards balance for many accounts at once
- Used Java 8 for development and integrated Apache Spark for scalability and processes parallelization
- Migrated account information from MongoDB for data aggregation in Cassandra tables; integrated application with existing Rewards platform
- Performed E2E testing via Jenkins, Sonar, and Cucumber
- Deployed into production and serviced over 10 million accounts

Leidos, Alexandria, VA — May 2016 - August 2016
Software Engineer Intern, Surveillance & Reconnaissance

- Worked on the Reduction of Data Using Compression Enhancement (RDUCE) project
- Optimized the software build process for LIDAR compression technology to remove deprecated software dependencies
- Developed a unit testing framework for the software API and internal libraries to support continuous integration
- Debugged and contributed back-end code in C++ using the RDUCE library
- Researched C++ open source libraries and arithmetic encoding techniques to help improve upon components of the project

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Additional Experience

University of Virginia, Charlottesville, VA — January 2016 - December 2017
Teaching Assistant, CS 2110 (Software Development Methods) and CS 4970/1 (Capstone Practicum)

- CS 2110 TA responsibilities included helping students understand the material during office hours and lab, and grading exams and assignments
- CS 4970/1 TA responsibilities were to help the Professor develop a new course logistics application in Django

Miracle Messages — September 2016 - May 2017
Lead Mobile Developer

- Built an Android application for the California-based non-profit organization Miracle Messages that "helps homeless people record short video messages to their long lost loved ones" (www.miraclemessages.org)
- Uses Amazon Web Service's S3 and Google Firebase to store uploaded videos for the organization
- Written in Java using Android Studio, AWS Android SDK, and Google Play Services

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Personal Information and Activities

Github: https://github.com/CheerfulSatchel
Personal website: https://cheerfulsatchel.github.io/
Programming Languages : C/C++, Java, Python, Swift, Javascript
LinkedIn: https://www.linkedin.com/in/therealjameswu/
IDEs: Visual Studio, IntelliJ, Android Studio, xCode
Frameworks: Unreal Engine 4, Django, Ruby on Rails