William C. Frank

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EDUCATION

University of California, Berkeley | Berkeley, CA

Bachelor of Arts in Computer Science

Coursework:

Operating Systems and Systems Programming (CS162), Efficient Algorithms and Intractable Problems (CS170), Computer Security (CS161), Internet Architecture and Protocols (CS168), Machine Structures (CS61C), Data Structures and Advanced Programming (CS61B), Structure and Interpretation of Computer Programs (CS61A)

EXPERIENCE

OSIsoft | San Leandro, CA

Software Development Engineer Intern

May 2017 - Present

Expected Graduation: May 2018

- Redesigned point creation subsystem to enforce stricter count licenses. Removed a periodic check that involved multiple RPCs to increase efficiency.
- Increased testing coverage for proprietary database command line tools
- Refactored test suites from a custom C++ unit testing framework to the Microsoft framework

Development Support Engineer Intern

May 2016 - Aug. 2016

- Researched and prototyped a voice user interface for proprietary data historian.
- Drafted an introductory learning guide for RESTful Web API. Covered web service basics such as HTTP and development in C# / Python. Reached over 100 customer views.

SKILLS

Programing Languages: Python, C, C#, Java, C++, Scheme, MIPS, Snap

Software / Tools / Frameworks: Flask, HTML, TFS, Git, Visual Studio, IntelliJ, MTM, REST, PyCrypto

PROJECTS

Pintos May. 2017

- Built fully functional OS from minimal skeleton. Designed, implemented, and tested tested several core OS features including: threading, user programs, and file system functionality. Written in C.

Secure File Store Mar. 2017

- Designed and built a secure and efficient file storage server using PyCrypto library that ensures confidentiality and integrity of files between multiple clients given a malicious server / users.

Distance Vector Routing Oct. 2016

- Implemented a distributed routing algorithm where multiple routers cooperate to transport packets to their destinations efficiently and employ best effort recovery. Written in Python.

Gitlet Dec. 2015

- Designed, developed, and tested a complete version control system in Java from scratch.

Solitaire Sep. 2015

- Created a Solitaire playing program with a GUI in Java using a MVC design pattern.

EXTRACURRICULARS

ANova | Berkeley, CA

Jan. 2017 - Present

Sep. 2014 - May 2017

Finance Officer | General Member / Mentor

- Responsible for funding onsite Computer Science mentorships and annual Hackathon for under-resourced high school students in the Bay Area. Works with 8 schools and hundreds of students per semester.

REACH! | Berkeley, CA

Director of Internal Affairs | ShadowNite Coordinator | ShadowNite Intern | Mentor

- Lead university recruitment and retention efforts for under-resourced high school students within the Greater Bay Area. Managed a \$50,000+ budget and reached 30,000+ students per academic year.