Kyle Franke

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Education

Binghamton University, State University of New York (Double Major) **May 2019 expected**

Overall GPA: 3.70/4.00 | Dean's List: Watson & Harpur, Spring 2016 – Present

Watson School of Engineering at Binghamton, Bachelor of Science in Computer Science

Major GPA: 3.87/4.00

Harpur College of Arts and Sciences at Binghamton, Bachelor of Arts in Mathematical Sciences

Major GPA: 3.93/4.00

Technical Skills

Strong languages: Java (Enterprise), Python, C++, C, Swift, X-86 Assembly, LaTeX

Software and OS: Eclipse, JUnit, Ansible, vim, JIRA, Jenkins, VirtualBox, IDLE, Git, Windows, centOS and Ubuntu

Additional: Swing, Clover, JavaScript, HTML/CSS, digital circuit design, number & set theory, multithreading

Professional Experience

Lockheed Martin, Software Engineering Intern Owego, NY, **May 2018 – August 2018**

-Worked with two mid-size Agile teams on a classified project on algorithms, automation of tasks, and integration
-Used Java EE and bash scripting to create client- and developer-side software solutions with other engineers
-Cooperated with system engineers and read their problem reports to find and address issues in our code
-Analyzed algorithms and found inefficiencies to solve existing problems and reduce program complexity
-Engaged in code reviews and SCRUMs with clients and peers as part of Agile to improve productivity

Shute Engineering, Intern Goshen, NY, **May 2016 – August 2016**

-Fixed, optimized, and updated the software of old and previously unusable PCs in the office
-Organized a common file network between office computers so important documents could be accessed anywhere
-Attended client meetings, took notes, and became familiar with client interactions
-Wrote weekly reports for management and kept an organized schedule of completed and to-be-completed tasks

Projects *[available on my GitHub; see top of document]*

Super Sweet File System (ssfs) Binghamton, NY, **April 2018 – May 2018**

-Architected, implemented, and tested a virtual file system written in C++ with three other peers
-Wrote high- and low-level "write" and "read" functions that correctly processed several gigabytes of data at once
-Efficiently stored and processed data at character level (rather than bit-level) as an added challenge
-Collaborated with peers and established version control using Git, presented to an audience upon completion

Xyphos Montgomery, NY, **March 2017 – June 2017**

-Coded an original Python program inspired by HBO's Silicon Valley that compresses and decompresses text files
-Manipulated text files using string and operator methods to decrease file size by as much as 20% in a few seconds
-Working on a second version in C that uses a bit-level Huffman algorithm to compress even more effectively

Transmogrifier Montgomery, NY, **October 2016 – December 2016**

-Developed a program in C that converts 64-bit double values to values of variable bit length and back
-Used low-level bit manipulation to perform operations with minimal precision loss and constant time complexity

Leadership and Volunteer Experience

Upsilon Pi Epsilon, Tutoring Coordinator of Iota Chapter, Binghamton, NY **August 2017 – Present**

-Tutoring students in courses such as Computer Systems I & II, Data Structures, Combinatorics, and Calculus I-III
-Leading other tutors to optimize tutoring efforts as the officer in charge, effective March 2018

LeetCode, Problem Contributor and Participant, Binghamton, NY **January 2018 – Present**

-Contributing several DS/A problems, solutions, and test cases to a free competitive coding/interview prep site
-Ranked ~95th percentile on overall problem completion/accuracy, ~85th percentile on weekly contest leaderboards

HACK BU, Organizer, Binghamton, NY **January 2016 – Present**

-Attending weekly meetings, helping fellow members with their code, and organizing semesterly hackathons