

Kyle Franke

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Education

Binghamton University, State University of New York

May 2019 expected

Overall GPA: 3.63/4.00 | Dean's List: Fall 2015 – Present

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

Major GPA: 3.92/4.00

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

Major GPA: 3.88/4.00

Technical Skills

Languages: C++, C, Python, Java, Swift, X-86 Assembly, MIPS Assembly, LaTeX

Software and OS: bash, vim, VirtualBox, VMWare, XCode, IDLE, Texmaker, Eclipse, Git, Ubuntu, Windows, OS X Sierra

Additional: regular expressions, basic JavaScript, basic HTML/CSS, digital circuit design, number & set theory

Professional Experience

Software Engineering Consultant

Binghamton, NY, **October 2017 – Present**

- Reaching out to clients, particularly local startups, to develop software at competitive rates
- Working with, meeting with, and reporting to clients directly for better results and appropriate deadlines
- Coding software, particularly in Java and Swift, for the CEO of Runaway App and Valdivian Consulting
- Documenting and reporting all development on a consistent weekly basis for clients' convenience
- Gaining real experience in a professional programming environment during free time

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 tasks

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

Transmogriifier

Binghamton, NY, **April 2017 – May 2017**

- Created and coded a program in C that converts 64-bit double values to values that take up less memory, and vice versa
- Utilized efficient and non-repetitive bit-shifting algorithms to minimize time and resource consumption
- Saved memory space on other C projects by importing Transmogriifier as a module and using its methods

Xyphos

Montgomery, NY, **March 2017 – Present**

- Coded an original Python program inspired by HBO's Silicon Valley that compresses and decompresses text files
- Manipulated text files using string methods, operator methods, and regular expressions to decrease the size of text files
- Decreased large file sizes by as much as 20% in a fraction of a second

EncryptionSim

Montgomery, NY, **June 2016 – July 2017**

- Used Python to encrypt plain-text input and convert it to a hashed string, or to decrypt an already encrypted string
- Encrypted strings using random insertion of tuple elements, decrypted by removing obfuscating elements with string methods
- Presented project to HACK BU members, taught students about encryption, and answered questions

Binghamton University, Java Co-Programmer

Binghamton, NY, **November 2016 – December 2016**

- Implemented a scientific calculator in Java to perform multiple complex mathematical operations and save user data
- Managed project using GitHub Version Control System and documented code using JavaDocs

Arduino Programmer

Binghamton, NY, **October 2016**

- Programmed open source electronics platform using C to play musical songs through 8-ohm speaker
- Submitted source code and live demonstration to TA for a perfect grade

Leadership Experience

Upsilon Pi Epsilon, Member & Tutor for Computer Science and Mathematics, Binghamton, NY

August 2017 – Present

- Tutoring students in over 10 courses, such as Computer Systems I & II, Data Structures, Combinatorics, and Calculus I-III
- Reaching out to fellow CS/Math students who are struggling with material to help them succeed

Student Support Services, Tutor for Computer Science and Calculus, Binghamton, N

January 2016 – December 2016

- Tutored students in Python and Java programming courses, as well as Calculus I, II, and III

HACK BU, Member and Presenter, Binghamton, NY

January 2016 – Present

- Attending weekly meetings, help fellow members with their code, and learn new things about the programming world
- Presented my EncryptionSim project in September of 2016 (see Projects)

Association for Computing Machinery (ACM), Binghamton, NY

September 2016 – Present

- Attending weekly meetings and coding competitions between members
- Engaging in difficult coding problems and group programming work to prepare for a professional environment

Employment

Partner, Stewart's Shops

Orange Lake, NY, **Summer 2016 & 2017**