Kyle Franke

51 Chestnut St, Binghamton, NY 13905 ● (845) 522-3208 ● kfranke1@binghamton.edu ● http://www.github.com/grawlixes

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

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
   -Advised the owner on operating systems and productivity software
   -Wrote weekly reports for management and kept an organized schedule of completed tasks

Freelance iOS Developer   Montgomery, NY/Binghamton, NY, **July 2017 – Present**
   -Coding a productivity app, NoteLock, which conveniently showcases reminders and notes by changing the user's lock screen
   -Utilizing XCode IDE for efficient program writing and testing
   -Developing in Swift and updating GitHub with progress
   -Planning a consistent, easy-to-understand user interface while programming internals functionally, rather than procedurally

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

Transmogrifier   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 Transmogrifier 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 to prepare for technical interview practice

Employment

Partner, Stewart's Shops   Orange Lake, NY, **Summer 2016 & 2017**