Justin Baum

Education

University of South Carolina, College of Engineering and Computing

Columbia, SC

Bachelor of Science, Computer Science; Minor in Mathematics

Aug. 2017 - May 2021

• Computer Science GPA: 3.93

Overall GPA: 3.81

- Honors: Tau Beta Pi Engineering Honors Society; Pi Mu Epsilon Mathematics Honor Society
- Student Organizations: Women in Computing; Minorities in Computing; Cybersecurity Club

Experience

Software Engineer, SWE Intern (Aug 2018 - May 2019)

August 2018 – Present

NineFX, Inc.

Columbia, SC

- · Expanded features on our flagship products, such as public key authentication and dynamic form rendering
- Assisted with developer onboarding and expanded company testing framework
- · Contributed over 45 thousand lines of documented and tested code into three internal projects
- Designed, and tested a unicode normalization library in bs-precis using agile methodologies
- · Worked full time during summers, part time while in school, and finished internship in May 2019

Supplemental Instructor Calculus II

January 2018 - May 2018

University of South Carolina, Department of Mathematics

Columbia, SC

- Led instruction sections of 10+ undergraduates to help reinforce Calculus II class materials
- Refined technical communication skills by breaking down mathematical concepts into lesson plans

Personal Projects

Pycoin | *Python, ECC Cryptography, Blockchain*

Jan 2019 - Present

• A work in progress bitcoin clone demonstrating blockchain technology, that is easy to read and understand

C Interpreter | C, Haskell, Operating Systems, Programming Language Design

Jan 2020 - May 2020

• An interpreter that parses C and runs it on an internal virtual machine, written in Haskell

Open Source Contributions | CPython, fastecdsa, MongooseIM, bsr-testing, bsr-select & more

2016 – Present

• Contributed to many libraries, small and large, including the Python programming language

Extracurricular Activities

President (2020 - Present), Treasurer (2019 - 2020)

October 2017 – Present

Association for Computing Machinery; University of South Carolina Chapter

Columbia, SC

- Led the club's organization of the 2019 and 2020 ACM Codeathon, a university wide competition in algorithms and data structures spanning 24 hours
- Collaborate with the executive board for internal affairs and work with the national organization
- · Work with local companies and sponsors for hiring USC students from Codeathons
- Organize logistics and funding for competitions like ICPC, including dinner and transportation
- Personal Competitive Success:

ACM Intercollegiate Programming Competition Regional Charleston | 2017 3rd | 2018 2nd | 2019 2nd

Skills

Languages: Python, C/C++, Java, Golang, Rust, OCaml, Haskell, shell

Tools: Git, AWS, SQL/NoSQL, Linux, ViM, Tmux, ssh

Interpersonal Strengths: Collaboration, Teamwork, Communication, Solution centered

Interests and Background: Basketball, Graph Theory, Compilers, Elliptic Curve and Lattice algebras