Rohith Rokkam

B.S. Computer Science (Honors) and Mathematics Stony Brook University, Spring 2019, Summa Cum Laude (GPA: 3.92) rohithrokkam@yahoo.com; (516)506-1196; github.com/rrokkam

Experience

Software Engineering MTS @ Tableau (Salesforce)

01/20 - Present

- improvements to system availability, reliability, observability (golden signals)
- drive availability to three nines
- work on a tracing / resource usage library for Tableau users
- speccing features and implementing them (error codes, logic asserts)
- reducing toil through automation of common procedures
- Java C++ flink kafka splunk NR tableau

Research and Development Intern - Sandia National Laboratories

06/18 - 08/19

- Added a parallelization layer for a C++ branch-and-bound solver framework
- Collaborated with researchers to design features and independently implement to specification
- Wrote dynamic and performant MPI code for use in large computer clusters

Teaching Assistant - Theory of Computation

Spring 2018/19

- Wrote and graded homework and exams on automata, formal languages, Turing machines, and complexity theory
- Lectured the class as a substitute

Teaching Assistant - Foundations of Computer Science

Spring 2017

- Helped a 100+ person class learn discrete math, logic, and proofs
- Instructed a 25-person weekly recitation section

Selected Projects

Peer-to-peer Filesystem

Spring 2018

- Wrote an Airdrop-like P2P service in Python using FUSE and a custom protocol
- Made a multithreaded bootstrap server to host the network

Packet SnifferCreated a packet sniffer using raw network sockets in Python

Spring 2018

- Created a packet shifter using raw network sockets in Fython
- Added output filters for protocols including TCP, UDP, IP, Ethernet, and DNS

Dynamic Memory Allocator

Spring 2018

- Developed a memory allocation library in C using a segmented free-list
- Implemented several optimizations from glibc malloc

Bash-like Shel

Fall 2017

- Made a shell in C with output redirection, piping, and background job support
- Carefully considered race conditions and handled asynchronous UNIX signals

Organizations

SBU Algorithms Lab

01/19 - 05/19

• Discussed topics in algorithms, discrete math, and data structures (ex: Bloom filters, DFT)

SBU Go Club - Secretary

Fall 2017 - Spr. 2019

- Hosted open-to-the-public Go tournaments at Stony Brook with 40+ entrants
- Taught new players how to play rules, strategy, etiquette..

SBU Undergrad Algorithms Reading Group

Fall 2017 - Spr. 2018

• Presented algorithms, data structures, and solved logic puzzles of interest

Selected Coursework

- Graduate: Algorithms (audited, Masters' and Ph.D. sections), Probability Theory, Algebra
- Undergraduate: Operating Systems, Linear Algebra, Network Programming, Systems Fundamentals, Theory of Computation