Rohith Rokkam

B.S. Computer Science (Honors) and Mathematics
Stony Brook University, Spring 2019, Summa Cum Laude (GPA: 3.92)
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Experience

Software Engineering MTS @ Tableau (Salesforce)   01/20 - Present
- Develop on ART, Tableau's homegrown tracing framework for internal use
- Help drive use of error codes for exceptions across the codebase for quicker mean-time-to-resolution of newly introduced defects
- Implemented data pipelines to track errors and automatically file defects to our bug tracker (in progress)
- Developed automation and dashboards in Tableau, Splunk, and New Relic to reduce toil and tedious bug investigations
- Improved monitoring on errors in effort to reach three nines of availability for Tableau visualization loads (<99.5% -> 99.8%)

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 Sniffer   Spring 2018
- Created a packet sniffer using raw network sockets in Python
- 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 Shell   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 Go tournaments with 40+ entrants; taught new players rules & strategy

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