

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, VizQL Server – Tableau (Salesforce) 01/20 - Present

- Propagating exception metadata across the Tableau monolith to identify common errors
- Contributed to latency tracking for Tableau's C++/Java telemetry library
- Created ETLs to stream logs to Snowflake using Apache Flink and Kafka
- Drove backlog prioritization and work intake as team scrum-master; ran standup and Scrum meetings
- Created Tableau and Splunk dashboards to monitor and prioritize improvements to golden signals and secondary metrics
- Wrote design documents and technical specifications for feature-level work
- Debugged production issues using Splunk, Tableau, and New Relic

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 and implement new features
- 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 and held regular office hours

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

- 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

- 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

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

Bash-like Shell

- 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

- Discussed algorithms, discrete math, and data structures (ex: Bloom filters, DFT, HyperLogLog)

SBU Go Club – Secretary

- Hosted open Go tournaments with 40+ entrants; taught new players rules & strategy

SBU Undergrad Algorithms Reading Group

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

Selected Coursework

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