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), VizQL Server **01/20 - Present**

- Used Apache Flink and Kafka to read logs and track errors in Snowflake for use in Tableau visualizations on service health.
- Contributed to ART, Tableau's tracing and resource allocation tracking framework for C++ and Java.

current project Improving the use of error codes and error sources for exceptions across the Tableau codebase to track causes of customer dissatisfaction and reduce MTTR for SLA-impacting issues.

- Availability + triaging
- Created Tableau and Splunk dashboards to track frequent errors and drive to three nines of availability for visualization loads in Tableau Online.
- Unified and improved VizQL Server healthchecks.
- 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

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