# 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, VizQL Server - Tableau (Salesforce)

01/20 - Present

- Propagating exception metadata across the Tableau monolith to identify and prioritize SLA-impacting defects (current project)
- Enabled client teams to debug cross-language performance issues through contributions to Tableau's C++/Java telemetry library
- Identified and triaged key sources of customer dissatisfaction in Tableau Online through development of Tableau nad Splunk dashboards to track golden signals and other metrics
- Set up audit logs and Snowflake datasources for Tableau visualizations using ETLs written in Apache Flink and Kafka
- Prioritized key issues blocking Tableau Online from reaching three nines of availability by driving backlog work intake as team scrum-master
- Wrote design documents and technical specifications for automation to automatically detect and triage SLA-impacting defects across the Analytics org
- Enabled VizQL Server to consistently self-heal by unifying VizQL Server healthchecks, removing a class of high-visibility defects
- Identified and debugged shipblocking 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, Machine Learning, Probability and Statistics for Data Science
- Personal: Category Theory for Programmers, Information Theory