Rohith Rokkam

rohithrokkam@yahoo.com; (516) 506-1196; github.com/rrokkam

Employment

Software Engineering SMTS - Salesforce / Tableau Software **05/22 - Present**
Software Engineering MTS - Salesforce / Tableau Software **01/20 - 04/22**

- Creating a tool to allow Tableau Prep customers to view and analyze their logs using Tableau
- Added functionality to allow client teams' usage of Tableau Prep to be individually tracked
- Coordinated cross-team efforts to remove insecure dependencies from Tableau Prep's Gradle builds
- Designed and implemented a rework of the Tableau error-asserting framework to replace frequently misused APIs with hygienic versions and sensible defaults
- Improved performance of the preflight CI pipeline using profiling tools, preventing hangs on large PRs and reducing time taken by over 50% on small PRs
- Wrote a technical specification for and prototyped a tool that detects and triages SLA-impacting defects for Tableau services using httpd logs
- Set up Snowflake data sources using ETLs written in Apache Flink and Kafka and created Tableau visualizations using those data sources to prioritize improvements to service observability
- As scrum lead, identified, triaged, and prioritized bugs causing customer-facing errors to drive availability of VizQL Server in Tableau Online from 99.5% to 99.9%
- Unified VizQL Server health checks, removing a class of high-visibility defects in Tableau Public by enabling the server to consistently self-heal
- Contributed features for Tableau's telemetry/resource tracing library aimed at helping developers debug cross-language performance issues
- Identified, triaged, debugged, and fixed critical shipblocking production defects using Splunk, Tableau, and New Relic

Research and Development Intern - Sandia National Laboratories **06/18 - 08/19**

- Implemented a parallelization layer for a C++ branch-and-bound based optimization framework
- Collaborated with researchers to design and implement new features at supercomputing scale
- Wrote dynamic MPI code for high-performance computing scenarios

Teaching Assistant - Theory of Computation **Spring 2018/19**

- Wrote and graded homework and exams on automata, languages, Turing machines, and complexity
- Lectured the class as a substitute and held regular office hours

Teaching Assistant - Foundations of Computer Science **Spring 2017**

- Taught a 25-person weekly recitation section discrete math, formal logic, and proofs

Projects

Peer-to-peer Filesystem

- Wrote an Airdrop-like P2P network in Python using FUSE, hosted on a multithreaded bootstrap server

Packet Sniffer

- Created a packet sniffer using raw sockets in Python that parses TCP, UDP, IP, Ethernet, and DNS

Dynamic Memory Allocator

- Wrote a memory allocation library in C using a segmented free-list and optimizations from glibc malloc

Bash-like Shell

- Made a shell in C that supports output redirection, piping, signal handling, and background job support

Education

- Personal: Crafting Interpreters, Category Theory for Programmers, Information Theory

Stony Brook University, B.S. **Spring 2019**

- Computer Science (Honors) and Mathematics, Summa Cum Laude
- Undergraduate Coursework: Operating Systems, Network Programming, Linear Algebra
- Graduate Coursework: Algorithms, Probability, Algebra

Algorithms Lab

- Worked on unsolved problems in algorithms, discrete math, and data structures
- Read and discussed research on ex: Bϵ-trees, skip lists, and Bloom filters