Rohith Rokkam

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

Employment

Senior Software Engineer, Tableau Prep Engine **May '22 - Present**

- Building an open-source C# log pipeline and visualizations for analysis of Prep log files in Tableau

Software Engineer, Tableau Prep Engine **May '21 - Apr '22**

- Implemented resource governance for embedding of Tableau Prep embeddings in external products
- Contributed to implementation of Parameters feature for Prep flow jobs
- Debugged tricky shipblocking internal compiler errors leading to generation of incorrect queries
- Drove cross-team efforts to improve Java dependency handling in Prep's Gradle builds
- Mentored engineers in product design, scrum, and tools including Git, Gradle, Splunk and debuggers

Software Engineer, VizQL Server **Jan '20 - May '21**

- Redesigned the Tableau error-asserting APIs to include error codes, and converted common misuses into compile-time failures
- Added cross-language Java/C++ telemetry/resource tracing for use in flamegraphs
- Profiled the Tableau preflight CI pipeline and improved performance by over 50%
- Wrote ETLs using Apache Flink and Kafka to identify SLA-impacting bugs in SaaS enviroments in logs, and prioritized and triaged those bugs across the Analytics org to improve availability to 99.9%

Research and Development Intern - Sandia National Laboratories **Jun '18 - Aug '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

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

Stony Brook 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

Projects

Interpreter

- Wrote an interpreter in Java for Lox, a programming language including typechecking, functions, objects, and control flow

Peer-to-peer Filesystem

- Built 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 while carefully considering race conditions