Rohith Rokkam

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Employment

Member of Technical Staff, Tableau Software / Salesforce   Jan. '20 - Present

Senior Software Engineer, Tableau Prep Engine   May '22 - Present
- Creating a log pipeline and visualizations to enable support engineers to analyze 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
- Solved 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 priorized and triaged those bugs across the Analytics org to improve availability to 99.9%

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

Stony Brook Algorithms Lab
- Worked on unsolved problems in algorithms, discrete math, and data structures
- Read and discussed research on ex: B_ϵ-trees, skip lists, and Bloom filters