

# Rohith Rokkam

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## interests

concurrent data structures, high-performance computing, algorithm design

## education

Stony Brook University  
B.S. Comp. Sci., Math  
Honors College  
GPA: 3.94  
expected graduation 2019

## contact

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## experience

2018 **Intern @ Sandia National Labs, Albuquerque, NM**  
Contributed to parallelization facilities for PEBBL, a MPI-based C++ framework for solving branch-and-bound problems.

## projects

- 2018 **Peer-to-peer Filesystem**  
A distributed filesystem written in Python using the FUSE library, using a bootstrap server to host.
- 2018 **Terminal Chat Service**  
A terminal chat client in C and multithreaded server in Python. Sends messages using a custom plaintext protocol.
- 2018 **Packet Sniffer**  
A packet sniffer implemented using Python's raw sockets. Dumps packets to human-readable, hex, or pcap (Wireshark-readable) forms.
- 2017 **Dynamic Memory Allocation Library**  
A memory allocator written in C, using a segmented free-list and first-fit allocation policy.
- 2017 **Shell**  
A shell written in C with bash-like output redirection and job control.
- 2017 **Memcached Clone**  
An in-memory caching service in C, implemented using a custom multithreading-safe queue and hashmap.
- 2016 **Navigation System**  
A GPS developed in Java using data from OpenStreetMap and an XML parser. Implements Dijkstra's shortest-path algorithm to calculate routes.

## teaching

- 2018 **Teaching Assistant: Theory of Computation**  
Wrote & graded homework on finite automata, formal languages, and Turing machines. Also taught as a substitute.
- 2017 **Teaching Assistant: Foundations of Computer Science**  
Instructed 20-person recitation section on discrete math, logic, and proof techniques.