chiranjeevic@gatech.edu
(470) 223-5682
U.S. Citizen

Chiranjeevi Chimmili

github.com/chiranchimmili
linkedin.com/in/chiranc
chiranchimmili.github.io

Education

Georgia Institute of Technology — Atlanta, GA
B.S. in Computer Science; GPA: 3.87 — *Aug 2021 - May 2025*

Concentrations: Systems & Networking

Coursework: Algorithm Design, Graduate Computer Architecture, Databases, Operating Systems, Compilers & Interpreters, *Information Security*, *Networking*, Differential Equations, Real Analysis, Combinatorics

Experience

Roblox — San Mateo, CA
Software Engineer Intern — *May 2023 – Aug 2023*

- Implemented multiple creator controls for limited items including resale restrictions and delayed publishing.
- Added new gRPC services, EaaS schema updates, and cache improvements, reducing one high-traffic API endpoint's QPS by 50%.
- Allowed 9+ brands, such as Netflix, Nike, and Fidelity, and 8% of creators to increase involvement and engagement, as well as promote market scarcity.

Viasat — Boston, MA
Software Engineer Intern — *May 2022 – Aug 2022*

- Created a 120% cheaper in-house alternative to Ixia/Spirent network testers by utilizing a Xilinx FPGA.
- Developed a configurable user-interface with FPGA communication using React, Flask, PySerial, and PYNQ that saved more configuration setup time and offered scripting capabilities.
- Networking testing features included packet generation, verification (headers, checksum, length, packet and burst gaps), and BERT.

Georgia Tech — Atlanta, GA
Teaching Assistant for Computer Systems — *Aug 2022 - Dec 2022*

- Assisted lectures, created assignments, and held weekly recitations & office hours for course of 350+ students.
- Taught topics such as processor design, pipelining, memory management, multithreading, and basic networking.

Research

Georgia Tech High Performance Architecture Lab — Atlanta, GA
Research Assistant — *Aug 2022 – Present*

- Researching into leveraging GPU resources (Streaming Multiprocessors) for DRAM soft-error correction.
- Coded multiple, optimized ECC schemes with CUDA, as well as hardware error simulation modules in GPGPUSim architecture.

Georgia Tech Research Institute — Atlanta, GA
Research Intern — *May 2022 – Jul 2022*

- Coded fully-functioning C++ program to improve efficiency and effectiveness of current encoding, decoding, and error correction DNA archival storage codecs.
- Implemented six-step pipeline including Galois-field based Reed-Solomon code, data interweaving with indexing, and byte-to-DNA base translation.
- Achieved 99.97% recovery rate at 0.47% total simulated error, comparable to modern codecs.
- Parallelized encoding and decoding utilizing multithreading, achieving 33% speed improvement.

Projects

COVID-19 Vaccine Notifier

- Programmed mass notification system in Python that informs patients of local clinic of their eligibility to receive the Moderna vaccine, helping hundreds of elderly and at-risk patients.

Skills

Languages: Python, C++, C, Java, Kotlin, JavaScript, Assembly
Technologies: Linux, ReactJS, Git, CUDA, Docker, gRPC, Flask, Android Studio
Interests: High Performance Computing, Information Theory, Poker, Board Games, Fitness, Soccer