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U.S. Citizen

Chiranjeevi Chimmili

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EDUCATION

Georgia Institute of Technology — Atlanta, GA
B.S. in Computer Science, B.S. in Mathematics; GPA: 3.83 — *Aug 2021 - May 2025*
Concentrations: Systems & Networking
Coursework: Algorithm Design, Graduate Computer Architecture, Systems & Networks, Databases, *Operating Systems,*
Compilers & Interpreters, Real Analysis, Combinatorics, Advanced Linear Algebra, Discrete Mathematics

WORK EXPERIENCE

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

Viasat Inc. – Secure Network Services — Boston, MA
Software Engineer Intern — *May 2022 – Aug 2022*
- Created a 190% cheaper in-house alternative to Ixia/Spirent network testers by utilizing a Xilinx FPGA.
- Developed a configurable user-interface using React and Flask that saved more configuration setup time, offered scripting capabilities, and remote access.
- Networking testing features include packet generation, verification (headers, checksum, length, packet and burst gaps), multi-streaming, BERT, and error injection.

Georgia Tech – College of Computing — 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 EXPERIENCE

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 memory error simulation modules in GPGPUSim architecture.

Georgia Tech Research Institute – CIPHER Lab — 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

- **Poker Solver:** Texas Hold'em poker solver that applies game theory principles and combinatorics. User can simulate and visualize outcomes of their hand and calculate hand equity.

- **Wildfire Risk Analysis:** Member of Big Data Big Impact's platform sub-team that managed API development and web-scraping. Centralized and homogenized data sets into Google Cloud Platform to be used for developing probabilistic wildfire susceptibility maps.

- **COVID-19 Vaccine Notifier:** Programmed mass notification system that informs patients of a local clinic of their eligibility to receive the Moderna vaccine, helping hundreds of elderly and at-risk patients.

SKILLS

Languages: Python, C++, Java, C, Kotlin, JavaScript, Assembly, SQL, LATEX
Technologies: Linux, ReactJS, Git, CUDA, Docker, Vim, VSCode, Flask, Android Studio,
Interests: High Performance Computing, Programming Languages, Sports, Poker, Board Games, Fitness