Min Han

Atlanta, GA | 423.356.7763 | 20min05han@gmail.com | U.S. Citizen | www.linkedin.com/in/minhan05 | min-han.netlify.app

Education

Georgia Institute of Technology | Atlanta, GA   *August 2024 – Present*
Bachelor of Science in Computer Engineering (CompE)
Zell Miller Scholarship, Minor in Mathematics
University of Georgia | Athens, GA   *August 2023 – May 2024*
Transfer with 93 Credit Hours   GPA 3.97
Presidential Scholar for Fall 2023

Skills

Programming: C/C++, Python, PyTorch, MATLAB, SystemVerilog, CUDA, Java, TypeScript, Node.js, React, React Native
Platforms: Windows 10 /11, Linux (Ubuntu, Debian), UNIX
Software: Android Studio, Xcode, Weights & Biases, Roboflow, KiCad, Fusion 360
Languages: Korean (native), English (fluent), Spanish (A1), Chinese (beginner)

Experience

SiliconJackets | Atlanta, GA   *September 2024 – Current*
Engineer | Digital Design Team
SiliconJacket's Digital Design team focuses on exploring SystemVerilog for digital design through collaborative learning and practical application. The team is dedicated to developing a custom RISC-V architecture processor, aiming to deepen expertise in both SystemVerilog and RISC-V architecture.
- *Collaborate with a team of engineers to design and implement the ALU module for a RISC-V CPU.*
- *Analyzed extensive documentation of RISC-V architecture to enhance understanding and application in processor design.*
- *Simulated and verified functionality of processors using Verilog, enhancing understanding of digital circuit design.*

UGA Robotics | Athens, GA   *August 2023 – May 2024*
Programmer & Designer
A university robotics club focused on the field of robotics with focuses in Battle Bots, IEEE robotics, and RoboDawg—a research project emulating the capabilities of Boston Dynamics's Spot robot.
- *Engineered a walking algorithm in C, employing inverse kinematics, PID control, and feedback loops for RoboDawgs.*
- *Utilized Machine Learning and Computer Vision for dynamic path-tracing and obstacle avoidance, optimizing movement.*
- *Designed, manufactured, and programmed a fully custom drum spinner Ant-Weight Battle Bot within a week.*

Sharc Lab@GT | Atlanta, GA   *August 2022 – May 2023*
Student Research Intern
Professor Callie Hao's lab specializes in research at the intersection of software and hardware co-design. The lab focuses on reconfigurable computing, machine learning-assisted electronic design automation (EDA), and graph neural networks (GNNs).
- *Contributed to the development of Implicit Neural Representation (INR) through focused research utilizing PyTorch.*
- *Analyzed and synthesized multiple research papers to identify potential algorithm enhancements.*
- *Worked on integrating various file types from different studies into a unified algorithmic approach.*
- *Collaborated with multidisciplinary team of graduates, undergraduates, and professors, leveraging diverse expertise.*

Projects

MyGPT2 — Recreating OpenAI's GPT-2 Model   *June 2024 – Present*
- *Developed a GPT-2 model from scratch using PyTorch, emulating the structure and capabilities of OpenAI's ChatGPT.*
- *Processed 500+ public domain books and fine-tuned the model to improve contextual understanding.*
- *Debugged and evaluated models to ensure accuracy and relevance as well as optimizing for performance.*

Plender — Mobile App for Better Time Management   *June 2024 –September 2024*
- *Designed and developed a cross-platform mobile application using React Native, targeting both Android and iOS devices.*
- *Leveraged LegendApp's highly optimized React state manager to attain close to 100% elimination of full-page re-renders.*
- *Implemented a local-first data storage system, syncing user data with Google Sheets, saving up to a $0.10 per user.*

Efficient GCD Computation Module Using SystemVerilog   *Fall 2022 – Summer 2024*
- *Developed a SystemVerilog module to calculate the Greatest Common Divisor using the Euclidean Algorithm.*
- *Implemented the Euclidean Algorithm in SystemVerilog to reduce compute time, enhancing overall module efficiency.*
- *Conducted thorough testing and verification of the compute module's performance and accuracy using a Verilog Testbench.*

Relevant Coursework

Logic Design: *Latches, Flip-Flops, Registers, Adders, Comparators, NAND gate optimization, Gate Array ASIC, IC, FPGA*
Circuit Design: *8-bit Computers, Bit-Array Programming, Circuit Theory, IC Chips, Arduino Programming*