Ganap Ashit Tewary

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GitHub: www.github.com/GanapT

Highly motivated senior-year Computer Systems Engineering student with a strong academic record and practical experience in instructional support and project development. Brings expertise in various programming languages, embedded software development, and a passion for solving complex engineering challenges. Demonstrates strong problem-solving skills, adaptability, and a commitment to innovation.

Education

B.S.E., Computer Systems Engineering Arizona State University, Tempe, AZ Admitted into MS program in Computer Engineering at ASU (Starting Fall 2025) GPA: 3.87/4.00 (Dean's List: Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024) Student in Barrett, The Honors College Activities: Google Developers Club, IEEE Student Club, Quantum Club Revelent Coursework: Embedded Microprocessor Systems, Design/Syn Digital Hardware, Electrical Circuits

Skills

Programming Languages: C, C++, Java, Python, Verilog, MATLAB Web Technologies: HTML, CSS, D3.js, Node.js Hardware: Embedded Systems, FPGA development, Digital Circuit Design, Electrical Lab Equipments and Components Technical Areas: Computer Architecture, Networks, Machine Learning, Internet of Things, Natural Language Processing Soft Skills: Adaptable, Flexible, Innovative, Team-oriented, Problem-solving, Critical thinking, Time management

Work Experience

School of Mathematics and Statistical Sciences, Arizona State University, Tempe, AZ Instructional Aide and Grader (August 2023 - Current)

Developed interactive math lessons, improving student engagement and overall class performance. Graded advanced mathematics coursework, streamlining processes to reduce turnaround time while maintaining high-quality feedback.

School of Computer and Augmented Intelligence, Arizona State University, Tempe, AZ Undergraduate Teaching Assistant (January 2025 - Current)

Assisting students in their class project on a one-to-one interaction. Helping students in their Embedded C code and hardware systems. Also to develop exam reviews and conduct study sessions for better understanding of theory.

Project

Fitness Tracker (FPGA-based):

Designed and implemented a fitness tracker using Verilog on an AMD Xilinx FPGA board and Integrated multiple sensors and developed algorithms for step counting and calorie estimation. Achieved 95% accuracy in step counting compared to commercial fitness trackers.

Autonomous Driving Vehicle (Embedded System)

Develop an autonomous cart using NXP ARM FRDM KL46Z microprocessor and embedded C to implement obstacle detection and path-finding algorithms for complex environment navigation. Presented at a university tech showcase, receiving recognition for innovation and further development.

Machine Learning Model for Financial Data Prediction (Honors Thesis)

Developing a scalable framework for creating and evaluating trading strategies using machine learning techniques on high-quality financial datasets for implementing machine learning libraries and Backtrader for model building and strategy evaluation. Integrating technical indicators, fundamental analysis metrics, and risk management techniques to create a flexible system adaptable to various market conditions.

Fall 2022 – (Expected) May 2025