Jesse Gillingham

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Pursuing the field of Embedded AI Research, with a focus on general AI systems. Adept in leadership, communication, and critical thinking. Skilled in C programming, embedded systems, and electrical engineering, while developing talent in artificial intelligence.

Education:

Bachelors of Science, Electrical Engineering   Expected Graduation: May, 2024

Iowa State University | Ames, IA 50014   GPA: 3.72/4.00

Professional Experience:

Embedded Systems Teaching Assistant (2023 - Present)
- Supervise and guide students in a hands-on lab environment, providing knowledge on debugging C programs for microcontrollers. Assist in interpreting microcontroller datasheets, conduct program testing, and offer constructive feedback to improve program performance.

MIT Lincoln Laboratory Intern (2023)
- Collaborated with the diffusion group to reduce defect counts on wafers. Designed and executed experiments, analyzed data to identify trends. Formulated hypotheses to address the origin of defects, contributing to improved wafer quality.
- Systematically reviewed and enhanced Photo Lithography recipes. Identified and eliminated duplicates, establishing a standardized naming convention. Renamed all recipes for consistency, streamlining the process and improving overall efficiency.

Iowa State's Microelectronic Research Center Research Assistant (2022-2023)
- Designed and manufactured microscopic needles to be used as sensors for virus detection in plants and animals
- Tested and manufactured microscopic hydrophobic structures to increase the sensitivity of a plasmonic sensor to detect lower concentration levels in fluids.

Classical Physics Supplemental Instruction Leader (2022)
- Designed lesion plans, scheduled lesions, and held exam review sessions for classical physics, resulting in positive student reviews and enhanced understanding of course material.

Skills:
- Proficient in Programming (C, VHDL, Matlab, Markdown)
- Embedded Systems
- Linux Terminal
- Git, GitHub, and GitLab
- Circuit Design, Analysis, and Fabrication
- Web Design (HTML, CSS)