Sachin Patel

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Education

Iowa State University, College of Engineering

Bachelor of Science in Computer Engineering

Expected May 2024

• Relevant Coursework: OOP, Data Structures, Algorithms, Embedded Systems

GPA: 4.0/4.0

Technical Skills

Languages				Software Tools		
Java	Python	С	C#	Django	React.js	Redux
C++	JavaScript	VBA	Verilog	Flask	Spring Boot	Git

Professional Experience

Vermeer Corporation

May 2022 - Present

Pella, IA

Embedded Software Engineering Intern

- Developed macros in **VBA** to assist electrical engineers with designing schematics in Zuken.
- Prevented the possibility of a faulty circuit being produced by creating a macro to analyze a schematic's circuit and check for any potential hazards.
- Iterated on user feedback to improve a macro that streamlines the process of placing wires in a Zuken schematic.

Expaaand Contract Services

Jul 2021 - Aug 2021

Remote

Front End Design Intern

- Produced a landing page prototype in **JavaScript** and **HTML/CSS** that secured a client.
- Designed detailed UIs for landing pages and widgets with Figma that pleased clients and investors.

ISU Department of Electrical and Computer Engineering Undergraduate Research Assistant

Jan 2021 – May 2021 Ames, IA

- Circuited a testbed that simulates different 5G environments using software-defined radios.
- Presented my project and research on 5G and wireless networks to the ISU Honors Community.

Relevant Activities

Cardinal Space Mining Controls Project Director

Sep 2020 – Present Ames, IA

- Led 9+ members to develop the software and electrical system of a lunar mining prototype robot.
- Won 1st place in autonomy and 2nd place overall at the 2022 NASA Lunabotics competition.
- Developed the obstacle detection subsystem using **Python**, a lidar scanner, and a Raspberry Pi.
- Integrated obstacle detection with path planning for robot traversal using Java and the roboRIO.
- Taught new members technical skills like programming in **Java**, using Git, and building circuits.

Selected Projects

Goal Trees - GitHub | Demo

Jul 2021 - Present

• Created a full stack webapp using **Django** and **React.js** for splitting goals into a tree of tasks.

Cosmobot - GitHub | Demo

Sep 2020 - Jun 2021

Built a 2D game with the Unity Engine and programmed the game mechanics and physics in C#.