# Shaunak M. Sarlashkar

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#### **EDUCATION**

#### **Purdue University**

West Lafayette, Indiana

Expected Graduation, May 2027

- B.S. in Computer Engineering o GPA: 3.62/4.00
  - o Concentrations: Artificial Intelligence & Machine Learning, Microelectronics & Semiconductors, Computer Systems
  - **o** Related Coursework: Intro to AI, Microprocessor Systems & Interfacing, OOP, Data Structures & Algorithms, Advanced C programming, Python For Data Science, Introduction to Digital System Design, Linear Circuit Analysis

#### **EXPERIENCE**

Xerox - Lexmark

Lexington, Kentucky

Firmware/Embedded Systems Intern

May 2025 – Aug 2025

- Benchmarked embedded boards using LMBENCH in a Yocto-based embedded Linux environment to evaluate CPU, memory, and I/O performance
- Improved image tuning framework for halftoning

## **Purdue VIP Beyond 5G**

West Lafayette, Indiana

Undergraduate Researcher

Aug 2024 – Dec 2024

- Prototyping and evaluating various technologies that could be used in the next generation wireless communication systems. Specifically, Ultra-Reliable Low-Latency Communication (URLLC)
- The focus of URLLC will be the backbone of future applications like autonomous vehicle control, drone autopilot, among other things

### **EPICS Imagination Station (IS)**

West Lafayette, Indiana

Software & Electronics Design Lead

Jan 2024 - Dec 2024

- Leading a team in developing and implementing software and electronic solutions for a Mars rover enclosure to deliver to Imagination Station, a science center for kids in Lafayette, Indiana
- Collaborating with a multidisciplinary team to integrate electronics and computer hardware components into the
  rover control console. Utilizing the Python programming language to create and maintain a graphical user interface
  (GUI) for the Mars rover control console

### **PROJECTS**

#### STM32 Smart Glasses for Gesture-Control + TinyML (WIP)

West Lafayette, Indiana

Personal Project

Apr 2025 – Present

- Building wearable smart glasses using the STM32F4 microcontroller and MPU6050 IMU for gesture-based controls
- Collecting and processing motion data; training and deploying a TinyML model on-device for real-time gesture classification
- Programming the microcontroller using low-level C and CMSIS libraries for efficient sensor data input

# VimDojo: Interacting Vim Learning Website (WIP)

West Lafayette, Indiana

Personal Project

Apr 2025 - Present

- Designing and developing a LeetCode-style interactive site for learning Vim commands and navigation
- Building front end components using React, Next.js

### **ACTIVITIES**

ML@Purdue

West Lafayette, Indiana

ML Hackathon Board

Aug 2024 – Present

- Working on a team project to create a hackathon leaderboard that integrates testing without leaking data
- Implementing and expanding my knowledge of ML and different Python libraries

## **SKILLS**

Programming: Java, Python, C, C++, MATLAB, SystemVerilog, RISC-V Assembly, PyTorch, Embedded Linux

Hardware: Digital System Design, Arduino, Circuit Analysis, STM32 Micro

Tools: Vim, IntelliJ, Linux, Unix, Git, GDB, KiCAD, LTSPICE