# **Eddie Ripple**

Natrona Heights, PA

www.ednotes.wiki/personal Github: erip3

## **EDUCATION**

## The Pennsylvania State University

- BS in Computer Science
Minors in Cybersecurity and Computer Engineering

2022-2026 (Expected) GPA: 3.98

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Phone:

- MS in Software Engineering

2026-2028 (Expected)

#### **Relevant Coursework**

Database Management, Systems Programming, Computer Architecture, Deep Learning, Data Structures and Algorithms, Computer Vision, Web Apps with OOP, Intermediate C++

## **TECHNICAL SKILLS**

Languages / Frameworks: Python, Java, C/C++, Verilog, TypeScript, React, Spring Boot

**Data/Databases:** SQL, PostgreSQL, MySQL, SQLite **Misc:** Git/GitHub, Visual Studio Code, Microsoft Office

#### **RELEVANT EXPERIENCE**

EdNotes.wiki Fall 2025

- Developed a full-stack web application serving as both a personal portfolio and an interactive platform for publishing computing articles and demonstrations

- Built frontend with React + TypeScript and backend with Java (Spring Boot) + PostgreSQL implementing RESTful APIs
- Containerized services with **Docker** and deployed to a **DigitalOcean droplet**

#### IT Auditor Intern: ATI - Pittsburgh, PA

Summer 2025

- Built a data analysis tool to identify duplicate invoices and erroneous payments, enabling recovery of ~\$40,000
  - Implemented tests with **Pandas** and **SQL** to flag potential duplicates
  - Designed a user interface using **HTML** and **CSS**, documented code, and wrote a user manual to support adoption and ease of use

### **Embedded Systems Fan Control Project**

Spring 2024

- Designed and implemented a fan control system using both an **FPGA + Verilog** and an **Arduino Microcontroller + Embedded C** for comparative evaluation
  - Displayed fan speed in RPS using OLED and 7-segment displays
  - Analyzed tradeoffs between FPGA-based and microcontroller-based approaches
  - Presented findings and Penn State New Kensington Research Expo

#### **EXTRACURRICULARS**

Tau Beta Pi

08/2024 - Present

University Park, PA

**Volunteer PowerPoint Creator** 

06/2022 - Present

Central Presbyterian Church, Tarentum, PA