David Reese

david33reese@gmail.com | (908) 581-9932 | U.S. Citizen | GitHub: davidreese3 | LinkedIn: davidreese3

Education

The University of Scranton

Scranton, PA

Master of Science in Software Engineering

May 2025

• GPA: 3.61/4.00

• Upsilon Pi Epsilon Honor Society Vice President

Bachelor of Science in Computer Science

Scranton, PA

• GPA: 3.62/4.00, Magna Cum Laude

May 2024

• Upsilon Pi Epsilon Honor Society Treasurer, Dean's List

Technical Skills

- Programming: Java, C, Python, HTML/Thymeleaf, CSS, JavaScript, VBA
- Development Tools: Spring Boot, Maven, Docker, Git/GitHub/GitLab, Mockito, JUnit
- Data Platforms: PostgreSQL, Oracle, MySQL, Hadoop

Employment

The University of Scranton

Scranton, PA

Computing Sciences Head Graduate Teaching Assistant

August 2023 - May 2025

- Taught and facilitated Computer Science labs to approximately 30 undergraduate students per semester
- Assisted students with material and assignments from undergraduate computer science lectures
- Collaborated with faculty to teach undergraduate lectures, proctor tests, and facilitate drop-in tutoring
- Oversaw computer science colloquia meetings by recording sessions and coordinating grading among GTAs
- Facilitated GTA team meetings to share updates, and address logistical or academic concerns among GTAs

Susquehanna International Group

Bala Cynwyd, PA

Operations Analyst Intern

June 2023 – August 2023

- Designed and implemented a **VBA** program to retrieve and structure data from approximately 120 Excel files and 10 databases based on user input
- Initiated the transition from heavily relied upon legacy **VBA** code into **Python** scripts for improved efficiency and maintainability
- Designed and deployed a **Python**-based email alert system to notify colleagues when certain thresholds were met in the database

Projects

Master's Thesis Project: RecipEase – Recipe Creation and Sharing Platform

- Developed a full-stack **Spring Boot** web application with **Thymeleaf** templating for novice users to create, share, and explore recipes
- Integrated a glossary service with dynamic term parsing and real-time ingredient substitution suggestions using **NLP** (Natural Language Parsing) techniques
- Containerized the application and **PostgreSQL** database with **Docker** for isolated, scalable deployment
- Implemented user authentication with Argon2 password hashing and session management
- Architected **RBAC** (Role-Based Access Control) system to support admin moderation workflows

Wrapped Rewritten – Spotify Data Analyzer

• Built a **Python** data analytics pipeline using **pandas**, and **matplotlib** to generate personalized listening visualizations and reports

Personal Portfolio Website

- Developed a portfolio using HTML, CSS, and JavaScript, hosted via GitHub Pages
- CLI Group Chat with Client-Server Communication
 - Engineered a terminal-based group chat system in C with real-time client-server communication, using **POSIX** threads and **mutexes** to ensure thread-safe message handling

Multi-Threaded Job Scheduler

Built a C-based batch job scheduler with multithreaded dispatching and time-based job execution using **POSIX** threads