#### Amanda Futterman

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#### **EDUCATION**

The Ohio State University, Columbus, Ohio

B.S. Computer Science and Engineering

### QUALIFICATIONS

- Specialization in Database Systems
- Programming Languages: Python, C#, SQL, C, Java, HTML, CSS, x86 Assembly
- Programming Software: Pycharm, VisualStudio, VS Code, SQL Server Management Studio, MATLAB
- Relevant Coursework: Operating Systems 1&2, Video Game Development, Principles of Programming Languages, Introduction & Advanced Database Management Systems, Computer Networking and Artificial Intelligence

### WORK EXPERIENCE

### Mettler Toledo, Columbus, Ohio

Software Development Intern on the Field Solutions Team

- Engage in Agile/Scrum ceremonies for .NET enterprise development on the Physical Evidence team
- Database engineering projects in SQL including a **index fragmentation script** to be run along with monthly releases and refactoring of the database to replace unnecessary sequence number tables with **Sequences** to settle technical debt
- Resolved **bugs** on customer-facing certification documents with a mistake in unit conversion
- Worked on a **computer networking** project in C# updating a Resource Database Collector communicating with another service through RabbitMQ to cut out a middle-man communicator to increase the systems efficiency in retrieving documents
- Created pull requests and worked with Polish code architects to produce highly abstracted and industry-standard code

### The Ohio State University, Columbus, Ohio

Operating Systems 2, Teaching Assistant

• Graded participation, homeworks, and labs, offering **constructive feedback** to enhance students' understanding of Computer Operating Systems and programming in **C** 

#### Cedar Pest Software (SaaS Startup), Tarrytown, New York

Software Engineering Internship

- Participated on an Agile team working as both a full-stack developer and a QA engineer
- Worked with esteemed back-end developers to implement multi-tenancy **authentication** and authorization, license plate validation scripts, and payment processing programs
- Generated UI components, create storybooks, and implemented bug fixes alongside front-end developers
- Performed end-to-end smoke tests of daily merge requests to confirm feature quality before pushes to the production branch

#### ACADEMIC ENGINEERING PROJECTS

#### Tokenizer, Parser, Executor for Core

• Implemented a made-up programming language based on **Context-Free Grammar** (CFG) to perform **tokenization**, interpretation, parsing, printing, and execution of scripts using the **Deterministic Finite Automaton** (DFA) approach alongside the Principles of Programming Languages coursework

#### Super Mario Bros Executable Game

• Collaborated with a small software development group comprising four peers across five sprints, employing the **Agile** methodology via **Azure DevOps**; creating a Super Mario Bros level 1-1 implementing software engineering techniques like **design patterns**, object oriented programming (OOP), collision detection, state transitions and event processing

#### **Producer - Consumer Problem Implemented with Semaphores**

• Wrote a single threaded interactive producer-consumer **program in C** to teach users about the problem with **shared memory** in a visual way implemented using a mutex semaphore and global variables as a final project for Operating Systems 2

#### **ACTIVITIES AND INTERESTS**

- Social Media Coordinator of the Association of Computing Machinery Women's Chapter (ACM-W)
  - **Manage website codebase on GitHub**, responsible for merchandise creation, design flyers on Canva to promote events, establish a positive and uplifting social media presence to inspire and empower women in Computer Science
- Alpha Gamma Delta Sorority Social Chair 2021-2022
- Personal hobbies include reading sci-fi novels, mental health advocacy, thrifting, and biking

### GPA 3.4 Anticipated Graduation: May 2024

## Spring 2023

#### Fall 2022

# Fall 2022

#### oach

# May 2023- Present

January- May 2023

May- August 2022