Tobias Kohn

208 227 6158 | tobiiascr7@hotmail.com | github.com/tobias2004 | Portland, OR

SUMMARY

Proactive leader at Oregon State University pursuing a BS in Computer Science. My experience in high-stress environments has sharpened my time management, problem-solving, and critical thinking skills, which I can apply to both technical challenges and interpersonal disputes. I excel at collaborating with a diverse team, communicating complex ideas early, and driving projects forward to meet deadlines.

EDUCATION

BS of Computer Science   Expected Jun. 2027

Oregon State University, Corvallis, OR

GPA: 3.94 / 4.0

Clubs and Organizations: Sigma Phi Epsilon, Association for Computing Machinery

Notable Coursework

Networks, Databases, (S25); Operating Systems, Linear Algebra (W25); Web Development, Data Structures, Vector Calculus (F24); Computer Architecture (S24); Discrete Math (W24)

EXPERIENCE

Incoming Health Informatics Intern   May 2025 - Aug. 2025

Vanderbilt University Medical Center, Nashville, TN

- Participant of the Vanderbilt Biomedical Informatics Summer Program.

DS / ML Undergraduate Researcher   Jan. 2025 - Jun. 2025

OSU SHARE Lab, Corvallis, OR

- Processed data from 50 in-home sensors across 100+ homes with **Pandas** and **NumPy** to support research on detecting cognitive decline in older adults.
- **Engineered features** from raw time-series data, analyzing inactivity and movement patterns within the home.
- Applied machine learning approaches with **scikit-learn** to predict the presence of amyloid plaques in subjects' brains.

Teaching Assistant   Sep. 2024 - Jun. 2025

Oregon State University, Corvallis, OR

- Managed and directed 2 labs with 25 students each week.
- Instructed a total of 100 students on **Python and C++** programming fundamentals, breaking down complex concepts into simple ideas to enhance comprehension.
- Provided guidance on coding assignments, strategies, and problem-solving techniques to reinforce students' understanding.

PROJECTS

Gym Buddy

Full-Stack Python App

- Developed a **full-stack** fitness tracking application allowing users to find exercises, log and retrieve workouts from an **SQLite database**.
- Constructed an interactive GUI with **PyQt5**, providing an intuitive interface for workout tracking and progress visualization with **Matplotlib**.
- Built a **Fast-API**-powered backend, enabling efficient exercise searches, filtered workout retrieval, and workout logging.
- Implemented a **microservices architecture** and designed code with the **Agile Scrum** framework.

Hunt the Wumpus

Terminal-based C++ Game

- Developed an adventure game where users explore a cave, navigate rooms, and encounter various events. Users use percept-hints to avoid negative events and escape with the gold.
- Implemented **Object-Oriented Programming** (OOP) principles, using polymorphism, inheritance, and abstract classes for dynamic event handling.
- Designed a modular 2D grid system with **STL vectors** to manage game entities.

SKILLS

- Languages: English (Native), Spanish (Native), French (Casual Proficiency)
- Programming: Python, C++, SQL, C
    - Data structures, algorithms, web development, software engineering, computer architecture
    - Developer Tools: Agile and Scrum (SDLC), Git and GitHub, VSCode, SSH

REFERENCES

Naomi Fitter	OSU SHARE Lab	naomi.fitter@oregonstate.edu
Dilan Senaratne	OSU Instructor	dilan.senaratne@oregonstate.edu
Jason Ideker	OSU Professor	jason.ideker@oregonstate.edu