Bob Wilson

Ann Arbor, MI | 248-797-5239 | bobgwilson.cs@gmail.com | linkedin.com/in/bobgwilson | bobgwilson.github.io

Computer Science Student seeking Software Engineering Internship or Co-op in Southeast Michigan or remote.

Education

Michigan State University	exp. graduation May 2027
B.S. in Computer Science. GPA: 2024 Summer & Fall 4.0, cum 3.627. Michigander Scholars Program	*East Lansing, MI*
Washtenaw Community College	Jan 2024 – Apr 2024
Computer Science Classes, 4.0 GPA, Dean's List - High Honors	*Ann Arbor, MI*
Macomb Community College	*Warren, MI*
Associate of General Studies, 4.0 GPA, summa cum laude, Dean's List. Studied MACA Digital Art & Animation Specialty	

Technical Skills

Languages and Libraries: C++ (wxWidgets, CMake, STL)**,** Python (Pandas, NumPy, SciPy, SymForce, Matplotlib, JSON, REST API, CSV), UML
Developer Tools: VS Code, CLion, Jupyter Notebook, Git, GitHub, Perforce, Jira, Visual Paradigm, Doxygen, Mac, Windows, Linux, Trello
Certifications: PCEP Certified Entry-Level Python Programmer, Adobe Certified Expert for After Effects, Photoshop, Premiere

Selected Experience

Software Engineering Intern	Jan 2025 – current
FreightVerity	*Ann Arbor, MI*

- Collaborate with development teams to build and optimize software solutions for automotive logistics software

Robotics Software Engineering Intern	Feb 2024 – Apr 2024
Skydio, the world leader in autonomous drones (in partnership with *Open Avenues Foundation*)	*San Francisco, CA (remote)*

- Developed a dynamics simulation and feedback controller for Skydio's quadrotor drone using Python, NumPy, SciPy, and SymForce.
- Delivered a GitHub repository with Jupyter notebooks, including implementations, derivations, and collaborative contributions.

Animator	Jan 2023 – Dec 2023
DreamWorks Animation	*Glendale, CA (remote)*

- Filed bug reports to improve animation software Premo, collaborated with Software Engineers to troubleshoot and test bug fixes
- Animated on the films *Trolls Band Together* and *Kung Fu Panda 4*

Animator	Dec 2021 – Dec 2022
Pixar Animation Studios	*Emeryville, CA (remote)*

- Filed bug reports for Pixar's proprietary animation software Presto, collaborated with the Software Engineers to test bug fixes
- Animated on the Disney+ series *Cars on the Road*, the film *Elio,* and the Oscar-Nominated film *Elemental*

Extensive experience as an Animator in Feature Animation (Pixar, DreamWorks), Aerospace (Williams International), VFX/AR/VR (ILM, ILMxLAB), Games (EA, PlayStation), Automotive (GM), and Advertising (Skidmore Studio, agencies including Doner, Y&R, with clients such as Ford, Chevy, Mazda, Microsoft Sync, and Michelin.) Full resume, awards, and portfolio available at: www.bobwilsonanimation.com

Projects

Prime And Composite Numbers Generator	Apr 2024

- Won 1st place in the Project Codeway competition in Washtenaw Community College's Intro to Computer Science class
- Wrote 100% of the Python code for team project that generates prime and composite numbers, and factorizes composites
- Voted Team MVP, Project Lead, came up with most of the ideas, and demonstrated the app to the class

Data Science Visualization - Crime Statistics Analysis	Apr 2024

- Analyzed FBI crime data using Python in WCC Intro to Python class, utilized JSON and Pandas modules for data processing
- Generated bar charts and tables using Matplotlib for regional crime statistics relative to the national average

Sparty's Boots Game (Team Project for MSU class CSE335 Object Oriented Software Design)	Oct 2024 – Nov 2024

- Team created a video game where the player builds circuits using AND, OR, NOT logic gates, entirely with C++ and wxWidgets
- Did the initial class design, wrote C++ code for numerous object classes, including XML LevelLoader, Conveyor Belt, Control Panel

Canadian Experience / Sparty-In-A-Box (Project for MSU class CSE335 Object Oriented Software Design)	Nov 2024 – Dec 2024

- Created a 2d animation software with jack-in-the-box machine simulator with crank, gears, and shafts using C++ and wxWidgets
- Led the team-based sub-project in designing the machine simulator in UML. We were the only team out of 42 teams to get our design approved on the first attempt.

Software I've Animated On: *Carne y Arena* VR (ILMxLAB, Academy Award winner), *Star Wars* mobile app AR (Lucasfilm/ILMxLAB), *The Sims 4* (EA), *Nissan Battle Test* VR (ILMxLAB), *God of War Ragnarök* (PlayStation), *Tron: Legacy* iPad App (DBML/Disney), *Jackpot Slots* mobile game (Present Creative/Funzio/Gree), *North American International Auto Show Press Kit* (Skidmore Studio)