MATTHEW KOSAREK

- 🖥️ Software Developer
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- 🇺🇸 United States Citizen

Languages	
JavaScript/ TypeScript	5 yrs
C#	2½ yrs
Python	2½ yrs
C/C++	1 yr
Java	1 yr

Technologies	
React	5 yrs
node.js	2½ yrs
Unity	2½ yrs
ASP.NET	2½ yrs
OpenGL	1 yr

Tools	
Git	5 yrs
Linux	5 yrs
VSCode	2½ yrs
Visual Studio	2½ yrs
Webpack	2½ yrs
Docker	1 yr

EXPERIENCE

Software Engineer II — Canonical
July 2023 to Present — Philadelphia, PA

- Working on Mir, a Wayland compositor

Software Team Lead for MachineApps — Vention
July 2020 to July 2023 — Montreal, QC

- Developed industrial software applications including cobot palletizers, cartesian palletizers, and path following machines
- Programmed, deployed, and supported several client projects valued over $100k+ USD each
- Developed the core user-facing API for programming industrial machines in Python
- Interfaced with both technical and non-technical teams on a daily basis
- Planned and organized long-term projects and daily tasks via Asana and Github Projects
- Programmed thousands of lines across the codebase, from the firmware running on a BeagleBone AI to the application layer running in the cloud
- Onboarded and mentored new members of the team

Software Engineer I — Big Huge Games
January 2018 to June 2020 — Timonium, MD

- Developed and maintained the data pipeline - from data entry, to data validation, to data publication - for Arcane Showdown
- Designed, built, and maintained a live operations scheduling and publishing web application for DomiNations
- Implemented a localization system for Arcane Showdown which allowed the game to be released in different languages
- Implemented game features on all parts of the stack, including tools, Unity client, and game servers

Teaching Assistant for Intro to Video Game Design — Johns Hopkins University
September 2017 to December 2017 — Baltimore, MD

- Assisted beginner programmers in the development of 2D game engines using SDL2

Software Engineering Intern — Big Huge Games
May 2017 to August 2017 — Timonium, MD

- Developed a tool using C# and GTK to improve the workflow of the quality assurance team for DomiNations
- Wrote a comprehensive user manual that explains how the tool functions for both technical and non-technical users

Software Engineering Intern — Sparkypants Studios
May 2016 to August 2016 — Baltimore, MD

- Developed a profiling framework for the game systems of Dropzone

EDUCATION

BSc Computer Engineering at Johns Hopkins University — Baltimore, MD
September 2014 to December 2017

- 3.53 GPA (Magna Cum Laude)
- Relevant Coursework: Computer Graphics, Object Oriented Software Engineering, Linear Algebra, Video Game Engines and Design, Operating Systems, Data Structures

PROJECTS

- My **self-hosted personal website** where I do small projects in WebAssembly and OpenGL: matthewkosarek.xyz
- A **game engine** that I built in C++ and OpenGL: github.com/mattkae/MatteEngine
- My **self-installing emacs configuration**: git.matthewkosarek.xyz/emacs_config/
- Unfinished website about **realtime physics in video games**: physicsforgames.com/