

MATTHEW KOSAREK

 Software Developer
matthewkosarek.xyz
github.com/mattkae
mkosare1@gmail.com
 United States Citizen

Languages

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

Libraries/Frameworks

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

EXPERIENCE

Software Team Lead

July 2020 to Present

Vention
Montreal, QC



- **Main Tech:** JavaScript, TypeScript, Python, Linux, Node.js
- Led a team in the development of client-facing industrial software applications including cobot palletizers, cartesian palletizers, and CNC machines
- Developed and deployed several client projects valued over \$100k+ USD each
- Architected and developed the core framework for all future client projects
- Interfaced with other teams on a daily basis including sales, customer success, application engineers, other software departments, and more
- Planned and organized long-term projects and daily tasks via Asana and Github Projects
- Programmed thousands of lines across the codebase, from firmware running on a BeagleBone AI to the application layer running on the web

Software Engineer I

January 2018 to June 2020

Big Huge Games
Timonium, MD



- **Main Tech:** C#, Unity, TypeScript, React
- Developed and maintained the data pipeline - from data entry, to data validation, to data publishing - 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

September 2017 to December 2017

Johns Hopkins University
Baltimore, MD



- **Main Tech:** C++, SDL2
- Assisted beginner programmers in the development of 2D game engines using SDL2

Software Engineering Intern

May 2017 to August 2017

Big Huge Games
Timonium, MD



- **Main Tech:** C#, GTK, Unity
- 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

May 2016 to August 2016

Sparkypants Studios
Baltimore, MD



- **Main Tech:** C++
- 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/