

# 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

## 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

September 2014 to December 2017

Baltimore, MD

- 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](http://matthewkosarek.xyz)
- A game engine that I built in C++ and OpenGL: [github.com/mattkae/MatteEngine](https://github.com/mattkae/MatteEngine)
- My self-installing emacs configuration: [git.matthewkosarek.xyz/emacs\\_config/](https://git.matthewkosarek.xyz/emacs_config/)
- Unfinished website about realtime physics in video games: [physicsforgames.com/](http://physicsforgames.com/)