

# MATTHEW KOSAREK

 Software Developer  
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 United States Citizen

## Languages

JavaScript	5 yrs
TypeScript	5 yrs
C#	2.5 yrs
Python	2.5 yrs
C/C++	1 yrs
Java	1 yr

## Libraries/Frameworks

React	5 yrs
node.js	2.5 yrs
Unity	2.5 yrs
ASP.NET	2.5 yrs
OpenGL	1 yr

## Tools

git	5 yrs
VSCode	2.5 yrs
Visual Studio	2.5 yr

## EXPERIENCE

### Software Team Lead

July 2020 to Present



- Led a team in the development of industrial software applications including cobot palletizers, cartesian palletizers, and CNC machines
- Architected and developed the core application-level framework for all future client projects
- Developed and deployed a number of client projects to factory floors
- Interfaced with other teams on a daily basis to align on business goals and meet deadlines
- Planned, scoped, and organized long-term projects and daily tasks via Asana and Github Projects
- Individually contributed across many aspects of the codebase, from the firmware to the application layer

Vention  
Montreal, QC

### Software Engineer I

January 2018 to June 2020



- 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

Big Huge Games  
Timonium, MD

### Teaching Assistant for Intro to Video Game Design

September 2017 to December 2017



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

Johns Hopkins University  
Baltimore, MD

### Software Engineering Intern

May 2017 to August 2017



- 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

Big Huge Games  
Timonium, MD

### Software Engineering Intern

May 2016 to August 2016



- Developed a profiling framework for the game systems of Dropzone

Sparkypants Studios  
Baltimore, MD

## 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, Introduction to Renewable Energy Engineering

## 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 from scratch 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/)