





# MATTHEW KOSAREK

 Software Developer  
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 United States Citizen


 C/C++

 JavaScript/TypeScript

 C#

 HTML/CSS

 Python

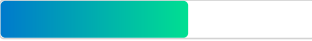
 Java

 Git

 npm

 Webpack

 Linux

 AWS

## EXPERIENCE

### Software Team Lead

July 2020 to Present



*Vention*  
Montreal, QC

- Led a team in the development of industrial software applications including robot palletizers, cartesian palletizers, and CNC machines
- Developed and shipped a number of client projects which are now being used everyday in factories
- Architected and developed a framework for all future client projects
- Interacted with other teams on a daily basis to align on business goals and meet deadlines
- Planned, scoped, and organized daily tasks and long-term projects
- Individually contributed across many aspects of the codebase, from firmware to the application layer

### Software Engineer I

January 2018 to June 2020



*Big Huge Games*  
Timonium, MD

- 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

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

### Software Engineering Intern

May 2017 to August 2017



*Big Huge Games*  
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

May 2016 to August 2016



*Sparkypants Studios*  
Baltimore, MD

- Developed a profiling framework for the game systems in *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, Introduction to Renewable Energy Engineering

## PROJECTS

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