Daniel Prilik

Software Developer

CONTACT

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SKILLS

DEVELOPMENT

C++
Rust
SDL2
node.js
HTML5 + CSS
JavaScript (ES6)
React & React Native
Typescript

TOOLS

Unreal Engine 4
Wwise
Unix
CMake
Git
Perforce
Visual Studio
Sublime Text

EDUCATION

University of Waterloo
BSE Software Engineering 2020

INTERESTS

Exploring Music
Big fan of Psych Rock, Synthwave, and Funk (to name a few)

Classic Movies / TV
Sucker for everything 80s, especially anything campy

Emulation
I keep up with the scene, and like to write my own emulators too

Webassembly and Emscripten
Pushing the boundaries of what a web-browser can do

Video Gaming
Rocket League, Civilization, Fallout, and many more

Memes

EMPLOYMENT

Microsoft - The Coalition — Vancouver, BC
Audio Engineer - *C++*, *Unreal Engine 4*, *Wwise* — *Fall 2017*

- Orchestrated an audio data migration that reduced asset duplication by 11x, and boosted artist productivity by eliminating contention on key assets
- Designed and Implemented custom UI components that expose Wwise functionality in UE4, greatly improving workflow for audio artists

LCBO|next — Kitchener, ON
Full Stack Web Developer - *React*, *React Native*, *node.js*, *Mapbox*, *Sass* — *Winter 2017*

- Lead Development and Design of a React SPA to locate products on virtual maps of LCBO locations
- Architected RESTful APIs, and aided in the development of associated node.js backends
- Implemented sales-data visualizations in React and React-Native using SVG and *Victory Charts*

Polar.me — Toronto, ON
Front End Web Developer - *HTML5*, *Sass*, *JS*, *node.js* — *Summer 2016*

- Designed and Implemented Native Advertisements for clients such as Engadget, Wired, and AOL
- Engineered and Deployed a build system to streamline and automate Native Ad development, resulting in significant boosts to developer throughput
- Developed a Slack Bot to interface with a nascent project-management platform with a limited API

PROJECTS

ANESE - *prilik.com/ANESE*

- A Nintendo Entertainment System (NES) Emulator focused on accuracy and clean, readable, C++11 code
- Researched and fully reimplemented the MOS 6502 processor used in the NES, including hardware quirks
- Currently researching and implementing the Picture Processing Unit (PPU), with SDL2 as a graphics backend

1212! - *1212.rocks*

- Designed and Developed a novel puzzle game for desktop and mobile
- Leveraged JavaScript, HTML5, and CSS to craft a responsive, intuitive, and user friendly web-game
- Gained a strong understanding of responsive design principles
- Acquired a playerbase of over 15000 people each month

nfinite.space - *devpost.com/software/nfinite-space*

- Imagined a cloud file-storage service that could store files without the need for a data-center
- Implemented a protocol to leverage space from connected users to store parts of other users' files
- Developed a proof-of-concept at Hack the North 2016 with a Golang backend, and a React frontend
- Winner of the AWS Sponsor Prize

mips241 - *prilik.com/mips241*

- Architected and Implemented an emulator for the MIPS system used in CS 241 at Waterloo
- Features a interactive debugger with step-by-step execution, breakpoints, and instruction disassembly
- Explored compiling C++ to JS using *emscripten* to create a Web interface for the emulator

Personal Portfolio - *prilik.com*

- User-interactivity is achieved using purely CSS3 animations to minimize JS performance impact
- Employed principles of responsive design to scale experience across Mobile and Desktop
- Showcases many other personal projects developed over the years

AWARDS

Winner of the Amazon Web Services (AWS) Sponsor Prize — 2017 *and* 2016
Hack the North 2016, QHacks 2017
For work on *nfinite.space* and *fastify* [github.com/Melinysh/fastify] respectively

Regional 2nd Place — 2015
Shalhevet Freyer International Physics SAFE Tournament

- Gained a understanding of Arduino programming principles and physical hardware development
- Organized a team to construct a challenging puzzle safe from the ground up
- Designed, Programmed, and Implemented the electronics that controlled various puzzles