

Education

Winter 2019
Fall 2016

University of Michigan

Major: Computer Science Engineering.

Courses: Computer architecture, operating systems, computer security, video game development, artificial intelligence.

Winter 2016

Washtenaw Community College

Courses: Java programming, web development.

Employment

Sept 2018
Feb 2014

Software Developer at Ann Arbor T-Shirt Company

Developed features and fixes in a small team for quote building software, production tracker, and retail backend using **Ruby on Rails**.

Wrote mobile app for quick pricing using **React Native**.

Proposed and implemented **unified authentication** system to provide single sign-on for all in-house apps.

Built image composition tool in **C++** using libpng. 1.5× speedup over original.

Set up and managed **AWS** Virtual Private Cloud infrastructure.

Integrated with several 3rd party APIs for services including Shopify, Amazon, PayPal.

Extracurricular

Always
2011

Game Development

Entered in game development competitions like **Ludum Dare**, in teams as well as solo.

Implemented pixel-perfect collision detection and lockstep drop-in networked multiplayer.

Built a small 2D sprite renderer in **Rust** and **OpenGL**.

Wrote a runtime **JVM bytecode** injection routine for Minecraft to disable entity collision.

Miscellaneous

Worked on Wine's (<https://winehq.org>) shell notification system.

Installed OpenWRT and Wireguard on router to secure shared condo network.

I maintain my portfolio site (nigelbaillie.me) using a custom static site generator, hosted on Netlify.