Andrew Guo

Embedded Software Developer | Full Stack Enthusiast

⌖ andguo.github.io　in linkedin.com/in/-andrewguo/　○ github.com/andGuo　✉ andrew.guo@carleton.ca

Education

Bachelor of Computer Science, Honours　　　　　　　　　　　　Sep 2020 – Apr 2025
Carleton University　　　　　　　　　　　　　　　　　　　　　Ottawa, Canada
- Third-year standing, 12.0/12.0 CGPA (A+)

Professional Experience

Software Developer　　　　　　　　　　　　　　　　　　May 2022 – Current
Ross Video　　　　　　　　　　　　　　　　　　　　　　　Ottawa, Canada
- R&D embedded C developer for flagship Ultrix Acuity Live Production Switchers
- Utilized Jira and Agile software development methodologies to fix bugs and implement new features

Teaching Assistant　　　　　　　　　　　　　　　　　　Sep 2021 – Apr 2022
Carleton University　　　　　　　　　　　　　　　　　　　Ottawa, Canada
- Collaborated with fellow teaching assistants to teach weekly tutorials in Python that reinforced student learning of course material
- Connected with students through weekly office hours that furthered their understanding of course material

Assistant Instructor　　　　　　　　　　　　　　　　　　Feb 2015 – Jan 2020
Kumon North America　　　　　　　　　　　　　　　　　　Ottawa, Canada
- Motivated student learning by providing constructive feedback on their work
- Organized student course material that ensured effectively learning in math and English

Projects

Personal Website 🔗
Gatsby, React, JavaScript, Tailwind CSS
- Deployed responsive static single page application with React router
- Implemented dark/light mode themes using React hooks (state, reducer, context, effect), Tailwind selectors, and browser cookies

Multithreaded HTTP Server 🔗
C, Bash
- Built an HTTP 0.9/1.0 web server using socket connections, mutexes, and condition variables
- Implemented a thread pool and task queue to parallelize connection handling
- Used regular expressions (regex) to parse client requests

Skills

C/C++　|　Python　|　Rust　|　JavaScript (ES6)　|　Node.js　|　Express.js　|　MongoDB　|　Gatsby　|　React

GraphQL　|　Java　|　Jira　|　Subversion　|　Git　|　Bash　|　GNU Make　|　TCP/IP - UDP

Multi-threaded and IPC programming