

JONATHAN ABRAMS

Software Engineer and Full-Stack Developer

 iotku.net |  jnthnab@gmail.com |  github.com/iotku |  Greater Seattle Washington Area

EDUCATION

University of Washington

Bachelor of Science in Computer Science - GPA 3.8 / 4.0

2025

PROJECTS

QuickClip | Go (Golang), Wasm (WebAssembly), Multimedia, Gio UI, GUI

2025 – Present

Developed a cross-platform audio player in **Go** targeting Windows, Linux, MacOS, and **Wasm**

- Designed responsive graphical user interface via **Gio** immediate mode **GUI** Library
- Featured audio waveform visualizations to produce engaging graphical effects

AutoSpace | Lua, Multimedia, Davinci Resolve

2025 – Present

Improved transcription-based editing workflows with the **Davinci Resolve** API with **Lua**

- Processed clips with **FFmpeg** to improve effectiveness of AI transcription-based editing
- Managed timeline spacing of video clips to ease and speed up video editing processes

Academic Projects (Collaborative) | Java, JavaScript, Next.js, Express, React, MySQL, HTML5

2022 – 2024

Collaborated with classmates using **Git**, Agile workflows, and pair programming

- Designed front-end interface for retrieving books using **Next.js** and **React** components
- Built a backend **RESTful** Web API using Node.js and the **Express** framework
- Architected a **MySQL** database for local restaurants and related information
- Created a classic 2D side-scrolling game in **JavaScript** with a utilizing the **HTML5** Canvas
- Utilized **JavaFX** to create a role playing game with battles and chance based interactions

Cryptography Suite Implementation | Java, Cryptography, ECC

2024

Encrypted and Decrypted information by developing **Java** based **cryptography** library

- Implemented SHA-3 and SHAKE cryptographic hash functions from specifications
- Utilized **elliptic curve cryptography** (ECC) scheme with NUMS-256 Edwards curve

Fuzzy Sheets | Shell (Bash)

2021 – Present

Interfaced with programming reference service with a **Terminal-based** client

- Integrated fuzzy finding thorough **fzf** to traverse a large list of topics effectively and quickly

Mumzic | Go (Golang), SQLite, JSON, VoIP

2020 – Present

Streamed audio as a Digital jukebox for **Mumble VoIP** (Voice over IP) servers

- Produced tools for reading associated metadata into a **SQLite** database
- Wrote SQL queries to search and filter metadata from various sources

TECHNICAL SKILLS

Languages: Java, Go (Golang), SQL (SQLite, MySQL), Lua, JavaScript, TypeScript, Shell (Bash)

Frontend: Gio, JavaFX, Next.js, React, HTML5, CSS3

Backend: Express, Node.js, RESTful APIs, FFmpeg

Cloud/DevOps: Amazon AWS (EC2, RDS, Lambda), GitHub Actions, Secure Access (SSH), Virtualization

Tools: Git, Linux, Docker Containers, JUnit, Postman, VS Code, Neovim, IntelliJ

EXPERIENCE AND LEADERSHIP

Grays Harbor College eSports Club

2018 – 2020

Grays Harbor College

Aberdeen, WA

- Coordinated with college administration during meetings to secure funding for initiatives
- Performed business meetings and submitted necessary documentation while tracking membership

Computer Technician

2018

Westside Technologies

Aberdeen, WA

- Diagnosed and resolved issues with client operating systems and hardware
- Detected and removed viruses and restored systems to a clean state