Hayes **Ashby**

Software Engineer

About me

I enjoy creating technology with a purpose. Developing tools to save time, or bring joy to peoples lives.

Languages

- English
- Chinese

Programming

- javascript
- html, css
- dart
- C#
- python
- LaTeX

Frameworks

- React
- Angular
- Flutter

Areas of specialization

- Event-Driven Architecture
- Web
- Test Driven Development

Interests

- Linux
- Android
- Flutter

Software Engineer
USSA · Mar 2022 – Current

- Migrating Decades old code to more modern practices of API's and event driven architecture.
- Developing Standards and practices that allow for cleaner architecture when working with multiple developers

Back-End Web Developer
IFIT · Jun 2021 – Feb 2022

- Took first place in workplace hackathon to improve our user's experience.
- Migrated a monolith legacy system to a micro service architecture leveraging *AWS* with *Serverless Framework* while maintaining data and user consistency.

Associate Software Engineer
Berkadia · Feb 2020 – Jun 2021

- Responsible for design and architecture for an enterprise grade micro-service system, in the regulation heavy CRE industry.
- Built a full stack application using *Angular* and *NodeJS* to help customers determine investment opportunities by assessing risk and helping with predictions. Generating over $1MM annually.
- Developed on top of an Event-Sourced Architecture, enabling real time situational awareness to business leaders to make informed decisions.

Software Engineer Intern
Icon Health and Fitness · Jun 2018 – Feb 2020

- Developed and maintained tests with *Xamarin UITest* for a cross platform mobile application with 1MM+ downloads.
- Maintained a in house mobile device testing cluster built in *NodeJS* for devices to run tests that required devices connect to physical exercise equipment.
- Developed tools for testing and assisted in testing through automation for proprietary android tablets. Saved 150+ hours of development time, and resulted in a large ($1.5MM) investment by moving device manufacturing in-house.

Projects

Benchmark	Icon had built custom embedded tablets for use in their exercise equipment. There were many different versions of hardware and software making debugging and performance monitoring difficult. **Benchmark** aimed to solve this problem by communicating over the *Android Debugging Bridge*. This allowed the use of popular apps for testing purposes like *Antutu* to be automated and ran in a controlled environment through logged versioning of the tablet with optimal consistency.
Network Testing Suite	*NTS* is a project designed to unravel the layers of communication protocols to detect network problems. Through packet monitoring and other methods it was able to follow the entire digital trail end to end to determine where the failure occurs.