



Experience

Jun 2021 — Present	Hulu, LLC Interim Software Development Manager — Living Room	Seattle, WA
Mar 2020 — Present	Hulu, LLC Principal Software Developer — Living Room <ul style="list-style-type: none">· Led team of 7 devs through complete UI rewrite, from prototyping to launch· Implemented Redux pattern in Roku ecosystem· Continued public maintenance of Hulu open-source projects (brs, roca, linter)· Integrated OSS browser automation framework for automated UI testing· Formal mentor to two other devs at Hulu	Seattle, WA
Mar 2018 — Mar 2020	Hulu, LLC Senior Software Developer — Living Room <ul style="list-style-type: none">· Maintained Hulu app on Roku, written in Roku-proprietary language· Led team of 5 devs to launch Hulu on Amazon Echo Show· Released splitshot (see open-source contributions) in public, including Hulu Tech Blog post· Integrated device-free unit testing for Roku app· Became internal point of contact for all Hulu open-source releases	Seattle, WA
Mar 2016 — Mar 2018	Hulu, LLC Software Developer — Living Room <ul style="list-style-type: none">· Maintained HTML/CSS/JS Hulu app on consoles, smart TVs, etc.· Worked with team of 4 to launch profiles support in HTML app· Embedded with backend team to build initial version of client-facing content API for live TV· Investigated app performance for Hulu with Live TV launch· Implemented view-model pattern in backend and in Hulu on Roku	Seattle, WA
Apr 2015 — Mar 2016	Amazon.com Software Development Engineer II — Marketplace Shipping Services <ul style="list-style-type: none">· Designed, implemented, and launched new public web service to purchase shipping labels for orders· Supported external users during six months of private beta of shipping label web service· Coordinated team of six developers working simultaneously in new codebase· Supported and advised team of India-based developers for contributions to my team's codebase	Seattle, WA
Aug 2013 — Apr 2015	Amazon.com Software Development Engineer I — Marketplace Shipping Services <ul style="list-style-type: none">· Reduced fatal errors from 1,100 per million requests to 200· Contributed to internal tools to read and transform log data· Developed and maintained Java service capable of processing ~1,000 requests per-second (peak)· Designed asynchronous workflow-based service to purchase up to 500 shipping labels merged into single PDF	Seattle, WA
Sep 2012 — Jun 2013	Drexel University Capstone Project Embedded Software Developer — Waterproof Recording Ammeter <ul style="list-style-type: none">· Evaluated microcontrollers for power consumption and peripheral support· Designed supporting circuits for PIC 18F microcontroller and sensors· Implemented I2C sensor readings via vendor library· Implemented data persistence on SD card via SPI via vendor library· Built USB serial support for configuration via PC	Philadelphia, PA
Apr 2012 — Sep 2012	Lockheed Martin MS2 Senior Technical Co-Op — Information Assurance (IA)	Moorestown, NJ
Mar 2011 — Sep 2011	Lockheed Martin MS2 Senior Technical Co-Op — Computer Infrastructure & Integration Testing	Moorestown, NJ



Notable Side Projects

- Oct 2020 ○ **thcon** — A configurable CLI tool that switches multiple apps between light and dark themes
Goal: See my screen better in the sun with fewer steps, teach myself Rust
Status: Published and actively developed
<https://github.com/theme-controller/thcon>
- Dec 2017 ○ **brs** — BrightScript interpreter implemented in TypeScript
Goal: Enable off-device testing by implementing (from-scratch) the language Roku apps are written in
Status: Maintained with coworkers and in active use
<https://github.com/sjbarag/brs>
- Aug 2015 ○ **PNRG (Poorly Named Resume Generator)** — Templated resume source generator
Goal: Reduce effort required to maintain multiple parallel resume formats
Status: Frozen; updated as-needed
<https://github.com/sjbarag/poorly-named-resume-generator>
- May 2011 ○ **Textspansion** — Text expansion for Android devices
Goal: Add missing features to Android ecosystem while learning Android dev paradigms
Status: Released June 2011, featured on Lifehacker.com in Sept 2011, now deprecated

Notable Open-Source Contributions

- Sep 2020 ○ **git** — Added support for clone.defaultRemoteName config
Status: Submitted and released in 2.30
<https://github.com/git/git/compare/54e85e7af1...de9ed3ef37>
- Jan 2019 ○ **roca** — Roku unit testing framework implemented on top of brs
Status: Developed in public, released, actively maintained with peers
<https://github.com/hulu/roca>
- Jan 2018 ○ **splitshot** — Generates TypeScript declarations from CoffeeScript sources
Status: Developed internally, released, frozen
<https://github.com/hulu/splitshot>
- Sep 2017 ○ **TypeScript** — Automatically inherit JSDoc comments subclasses and subinterfaces
Status: Submitted and released in 2.7
<https://github.com/microsoft/TypeScript/pull/18804>

Education

Drexel University — Graduated Jun 2013
BS in Computer Engineering
BS in Electrical Engineering (Electronics)
Minor in Computer Science

Philadelphia, PA
Cumulative GPA: 3.58 | In-major: 3.63

Skills

Languages

- Bash/POSIX shells
- C
- Docker (as needed)
- Java
- JavaScript / TypeScript
- \LaTeX
- Python
- Rust (still learning)

Operating Systems

- macOS
- Linux (Arch, Debian, Fedora, RHEL, Ubuntu)
- Solaris 9 (briefly)

Tools

- AWS S3, DynamoDB, SQS, SNS, Lambda
- DBus
- git
- vim

Paradigms

- Distributed systems
- HTML Single-Page Apps (SPA)
- HTTP REST (client and server)
- Language Interpreters
- Service-Oriented Architectures (SOA)
- SQL and NoSQL databases