Sean Barag

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Experience

Jun 2021 O Hulu, LLC

Hulu, LLC

Seattle, WA

Present Mar 2020 Interim Software Development Manager — Living Room

Present Principal Software Developer — Living Room Seattle, WA

- - · 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

Mar 2018

Hulu, LLC

Seattle, WA

- Mar 2020 Senior Software Developer — Living Room
 - · 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

Mar 2016

Hulu, LLC

Seattle, WA

- Mar 2018
- Software Developer Living Room
 - · 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

Apr 2015

Amazon.com

Seattle, WA

- Mar 2016

- Software Development Engineer II Marketplace Shipping Services
 - 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

Aug 2013

Amazon.com

Seattle, WA

- Apr 2015 Software Development Engineer I — Marketplace Shipping Services
 - · 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

Sep 2012

Drexel University Capstone Project

Philadelphia, PA

Jun 2013

Embedded Software Developer — Waterproof Recording Ammeter

- · Evaluated microcontrollers for power consumption and peripheral support
- · Designed supporting circuits for PIC 18F microontroller and sensors
- Implemented I2C sensor readings via vendor library
- · Implementd data persistence on SD card via SPI via vendor library
- · Built USB serial support for configuration via PC

Apr 2012

Lockheed Martin MS2

Moorestown, NJ

Sep 2012

Senior Technical Co-Op — Information Assurance (IA)

Mar 2011 Lockheed Martin MS2

Moorestown, NJ

Sep 2011

Senior Technical Co-Op — Computer Infrastructure & Integration Testing

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Notable Side Projects

Oct 2020 \circ **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 \Diamond **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 \d **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 \circ **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

Skills

Languages

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

Operating Systems

- · Linux (Arch, Debian, Fedora, RHEL, Ubuntu)
- · Unix (Solaris 9)
- · Mac OS (10.5, 10.6, 10.15)

Tools

· AWS S3, DyamoDB, SQS, SNS, Lambda

Philadelphia, PA

Cumulative GPA: 3.58 | In-major: 3.63

- 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