Whymarrh Whitby

EXPERIENCE

Staff Software Developer @ 1Password · Nov 2020 → Today

I work at 1Password, one of the most loved password managers. I am currently a technical lead on the Billing & Payments team. On prior teams, I worked on the 1Password design system, improvements to the sign-up flow, and user on-boarding & education.

Roles & responsibilities:

- Mentor new developers on testing, version control, TypeScript, and Golang
- Design and build front-end UI components and features
- Architect server features and data migrations (Golang and MySQL)
- Review and respond to external security audits for the 1Password web client

Senior Software Developer @ MetaMask · Jan 2018 → Nov 2020

I worked on MetaMask, a browser extension that allows websites to interact with Ethereum APIs. In my time working on the project, MetaMask doubled in users from roughly 500k to 1M+ users across multiple browsers. All of my work on the extension is available on GitHub.

Roles & responsibilities:

- Designed and built front-end features for the extension using React and Redux
- Implemented components based on designs and wireframes in Figma
- Maintained a medium-sized open source project (3.5k stars, 150+ contributors)
  - Responded to user feedback and triage issues from the community
  - Reviewed code from the community and help contributors land their patches
- Maintained JavaScript packages across the organization (10+ packages, 12k+ dependents)

Senior Software Developer @ Iceberg Finder · Dec 2017 → Jan 2020

I helped build Newfoundland and Labrador's Iceberg Finder website. The site allows users to locate icebergs and share iceberg photos.

Roles & responsibilities:

- Built a web-based mapping application that displayed geospatial iceberg data
  - React components based on a UI design system in Sketch
  - API integrations with Redux and redux-observable/RxJS
  - HTTP APIs in Node.js for processing, storing, and querying geospatial data
- Managed server infrastructure on DigitalOcean using Terraform
- Mentored new developers on testing, version control, and JavaScript/TypeScript

Awards:

- Gold - 2019 ICE Awards for Apps/Mobile - IcebergFinder.com
- Gold - 2019 ICE Awards for Website - IcebergFinder.com
- Silver - 2019 Marketing Awards Digital - Creative Use of Technology
- Gold - Digital Marketing at the 2018 HSMAI Adrian Awards Competition
- Platinum - Digital Campaign at the 2018 HSMAI Adrian Awards Competition

Software Developer @ Bluedrop Learning Networks · Dec 2016 → Jan 2018

I worked on Bluedrop's SkillsPass website and built the first version of Bluedrop Q. SkillsPass allows companies to manage training certifications for their workers and Bluedrop Q offers companies a web- and workflow-based form editor for their employee/customer onboarding.

Roles & responsibilities:

- Designed React components based on high-fi UI designs and low-fi wireframes
- Developed RESTful APIs using Node.js and FeathersJS
- Maintained internal JavaScript packages and tooling
- Mentored new developers on testing, version control, and JavaScript

Lead Software Developer @ Eastern Edge Robotics · Jul 2015 → Jun 2016

I was the lead software developer for the 2016 Eastern Edge Robotics team. We competed at the 2016 MATE International ROV Competition against 30 teams, finishing 1st overall at the 2016 MATE International ROV Competition.

Roles & responsibilities:

- Lead a team of software developers; planned and delegated tasks
- Contributed to technical documentation for the vehicle and its control software
- Built control software for an underwater vehicle in Java and Kotlin

Software Developer @ Amec Foster Wheeler · Apr 2014 → Aug 2015
Software Developer @ Amec Foster Wheeler · May 2016 → Dec 2016 ↵

I worked in Met-Ocean Services at Amec Foster Wheeler on operational weather forecast tooling. I also built an ice surveillance system used for risk management and ice forecasting that tracked icebergs in the Atlantic Ocean and provided movement forecasts for oil rigs.

Roles & responsibilities:

- Maintained weather forecast tooling in Python, Node.js, Docker, Ansible, and shell scripts
- Designed and built a data processing pipeline to download, parse, and store geospatial data
- Built a web-based mapping application that displayed icebergs and their forecasts
- Administered and automated Ubuntu and Fedora servers, both on-premise and on AWS

OPEN SOURCE

Private Relay · May 2020 → Today
Keywords: HAProxy, Docker, Terraform

A privacy-preserving TCP proxy based on Signal implementation of GIF search. The proxy server runs HAProxy in TCP mode and the TLS connection passes through to the destination host, providing privacy at the cost of an extra TCP connection. The project is published as a Docker image and Terraform module.

RxBroadcast · Jan 2016 → Today
Keywords: Java, RxJava, reactive programming, mutation testing, distributed systems, Docker

RxBroadcast is a distributed event library for the Java Virtual Machine, factored out of the control software for an underwater robotics project. The library supports UDP broadcasts, ordering requirements, and both events on a single machine and across networked machines. It is built using Reactive Extensions for Java, complete with integration tests, unit tests, and 99% mutation test coverage.

RESEARCH PAPERS

Sunken History of Grand Lake · Dec 2017

Published in *The Journal of Ocean Technology*, Vol. 12, No. 4, 2017