SAMUEL LITTLEY

I am an experienced Software Engineer and ex-SRE with a passion for building reliable, scalable, and maintainable software. I also have a strong interest in helping others to develop their skills by providing mentoring and training in a variety of contexts.

Personal Information

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Work Experience - Google (Dublin and London)

Current

Data Platform Onboarding, Google for Clinicians (G4C)

Apr 2022

Senior Software Engineer

I built a replacement UI (using a Java/TypeScript internal framework) to manage sources of Change Data Capture (CDC) data used by the G4C pipelines, reducing the overhead of onboarding new partners. I also researched and developed (using Golang) capabilities for ingesting data via standardised APIs instead of CDC, including managing a relationship with a third party provider.

Apr 2022

Ads Frontend SRE

Jun 2020

Senior Software Engineer, Site Reliability Engineering

I led the frontend and backend implementation (Golang, Angular, Typescript) of "the one dashboard to rule them all" providing an overview of system health and hygiene across Ads, Commerce, and Payments, based on associating data points with a knowledge graph and performing templated aggregation operations across the structure of the graph to support a variety of visualisations. This was used to drive efforts to improve ACP systems and reduce incidents. I was also an active member of the oncall rotation for the Google Ads frontends used by advertisers and publishers.

Jun 2020

Reliability Analysis

Jan 2019

Senior Software Engineer, Site Reliability Engineering

I worked on an agile software development team embedded within SRE to build tooling for analysing reliability indicators (Golang, Angular, Typescript), and determining correlation between automated indicators (such as SLIs) and human-labelled incidents. This was used to pinpoint areas where monitoring needed improvement. As a team, we also built tooling for calculating a severity for an incident based on known features of the incident's impact, to improve consistency of responses and external communications. While on this team, I was also an active member of the oncall rotation for a system used to probe the health of GCP services from Kubernetes clusters running on both GCP and AWS.

Jan 2019

Mobile Infrastructure SRE

Jul 2016

Software Engineer, Site Reliability Engineering

I was the service owner/lead for SRE's relationship with the Android Google Search App, and led the introduction of various process improvements to improve the safety and reliability of feature changes through binary releases and flag-controlled experiments. I also drove the development of a simple script for evaluating release metrics into a managed service (Golang) used across the company for evaluating mobile app releases.

Throughout

Community Contributions

I support the Software Engineering apprenticeships program in London, currently providing Computer Science education, and previously acting as a cohort coordinator. I am also an active TypeScript readability reviewer, a makerspace coordinator, and a facilitator of code retreat and legacy code retreat classes.

Performance Feedback

Jan 2023

Samuel is highly productive and can be relied upon to fix issues or quickly develop new features. [He] is a very dependable team mate, helping others and delivering quickly on his commitments. [He] is keen to ensure that everyone feels included and will speak plainly if he observes non-inclusive behavior.

Mar 2022

Samuel is consistently delivering work that makes a difference, both to his main projects such as Hydrogen, and Google as a whole through his work with the Makerspaces and the SWE Apprenticeships. He is a leader on his team and manages relationships across Google on behalf of Hydrogen.

Sep 2021

Samuel is an excellent educator and mentor, and consistently finds opportunities to lead others and advocates for his colleagues to do the same. This is demonstrated by his work with apprentices, his support for interns hosted by his team, and his hosting of team training and lightning talk sessions. Imparting knowledge and training is a key part of leadership, and it is something Samuel does very well.

PREVIOUS WORK EXPERIENCE

Oct 2015

Semmle Ltd

Jun 2015

Software Engineering Intern

I built a Sublime Text plugin to integrate Semmle's core software analysis products with the text editor, using a common codebase that ran under both Python 2.6 and Python 3.3 (for Sublime Text versions 2 and 3). I also prototyped a web-based interface to Semmle's analysis querying platform on GCP (using Java).

EDUCATION

Jul 2016

Master of Computer Science, University of Oxford

Oct 2012 | First-class Honours

Thesis: "Interpolation of 3D slice volume data for 3D printing" - processing low-resolution (e.g. 10 mm/slice) segmented MRI data to provide smoother 3D models. Supervisor: Dr. Irina Voiculescu. Presented at SPIE Medical Imaging 2017: doi.org/10.1117/12.2254616

SKILLS

Languages

Proficient: Golang, TypeScript, Java, Python

Basic: C++

Technologies

Proficient: Angular, Bazel, Git

Basic: Google Cloud Platform, Terraform

Principles

Reliable Software Design, Code Health, Automation, Incident Management, Monitoring, Infras-

tructure as Code

Interests and Activities

Community Theatre (Lighting Design), Wood turning, Cooking