# **ISAAC ZINDA**

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#### **EDUCATION**

HARVEY MUDD COLLEGE, GPA 3.78 B.S. Computer Science: May 2020

# **RELEVANT COURSEWORK**

Automatic Speech Recognition · Probability and Statistics · Computability and Logic · Algorithms · Discrete Mathematics · Microprocessors · Programming Languages

#### **COMPUTER SKILLS**

Languages: Go · Python · C · Javascript · C++ · C#

Software: Kubernetes · Docker · OpenTelemetry · Terraform · Git · GCP · Unix · SQL · Bash

#### **WORK EXPERIENCE**

# Lightstep (acquired by ServiceNow June 2021)

Senior Software Engineer

2023-present

- Designed <u>UQL</u> (unified query language) features for querying logs and spans
- Helped design & implement unified telemetry ingestion pipeline, built on OpenTelemetry Collector
- Setup instrumentation & observability for MetricDB service using <u>OpenTelemetry</u> components

Software Engineer II 2021-2023

- Designed & implemented "tqlmixer" platform service providing internal query interface
- Led platform initiative to replace old JSON query format with UQL
- Implemented index optimization in spans database to improve numeric comparison filters

Software Engineer I 2020-2021

- Co-created system to record UQL queries: buffers records to disk, periodically flushes to BigQuery
- Designed and implemented new service "cwingest" to ingest metrics from Amazon CloudWatch
- Developed many UQL features: regex, numeric comparison, top/bottom, percentile, pow, ...

### Software Engineering Intern

summer 2019

Designed & built CI pipeline to analyze performance of OpenTracing tracers

# Leidos, Harvey Mudd Clinic Project

2020

- Designed digital downsampler using SystemVerilog and new "high-level synthesis" technique
- Presented comparison of the two design methodologies to Leidos

### Loansnap, Software Engineering Intern

summer 2018

- Designed and built internal URL shortener using Django
- Created eSignature page using React, backend sends eSignature links over email or SMS

### **Breznay Research Lab**

2017-18

- Collected & analyzed resonant inelastic x-ray scattering data at Argonne synchrotron
- Data analysis in Python using Numpy, presented Matplotlib charts in Jupyter Notebook
- Co-authored paper, accepted to Physical Review B and named "Editors Suggestion"

#### Microsoft Research, Software Engineer Intern

spring 2016

- Validated high-altitude wind model using airspeed of planes as groundtruth
- Built C# backend to ingest data from planes and serve models, deployed on Azure
- Presented findings to client with Microsoft Research Director, Eric Horowitz

### University of Washington Ubiquitous Computing Lab, Research Intern

summer 2015

- Augmented Nexus 5 smartphone kernel to improve performance of touchscreen when wet
- Co-authored paper, accepted to International Conference on Multimodal Interaction 2018

#### **LEADERSHIP**

Admission Interviewer, Harvey Mudd: Interview prospective students	2020
Tour Guide, Harvey Mudd: Give tours of campus to prospective students	2017-19
Honor Board Representative, Harvey Mudd: Investigate academic dishonesty and misconduct	2018