Roy Rinberg

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Current Residence: San Francisco, CA

Professional Summary

I am a Software Engineer with varied experience working in small, DIY startup culture. I have cross-cutting experience from Data Engineering and Application Development, to DevOps and Build System engineering. I have strong communication skills and a UX/UI focus.

Primary Software Experience: Linux, C++, ROS, Python, Docker

Familiar Software Experience: Jenkins, GCloud, SQL, ElasticSearch and Kibana, Artifactory

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Work Experience

Ouster. Software Engineer. 2018-Present

Infrastructure and cross-team development:

- Created automatic data-pulling service for IOT devices, through integration with Google PubSub.
  - Integrated ELK logging and alerting for traceability of data and rapid response to errors.
  - System saves >3hr/day for field-team and calibration team.
- Produced set of python APIs and CLIs for cross-team devs and processes to interact with data
  - Allowed interaction with ROS data independent of ROS dependencies.
- Built support for custom python packages into production and development images; integrating custom debian packages into our linux builds through Jenkins, Docker, and Artifactory.
- Built local ROS testing + development framework for deterministic algorithm playback.
  - Used across the entire team and CI ubiquitously.
- Developed codebase + framework for visualizing algorithm performance with matplotlib

Algorithm Development and Data Engineering:

- Developed pandas pipeline for evaluating algorithms against 100s of hours of historical lidar data.
- Developed and maintain C++ algorithm to run on IOT devices in the field and produce real-time alerts to managers about dangerous driving behaviour.

Open-Source development:

- Produced open-source C++ lidar data visualizer: github.com/ouster-lidar/ouster_example

Career Copilots. Software Engineer. Part-time. 2020

Software and Data Engineering

- Created python web-scraper to scrape jobs-data to help users find roles catered to them
- Created pandas data-exploratory pipeline for investigating data for user testing.

NYU. Student Researcher. 2017-2018

Computational Linguistics Research and Data Engineering:

- Experimental Design work: scraped ~2 TB of reddit data, and developed data-science framework to identify echo-chambers + filter bubbles, using OpenMP on a High-Performance Cluster.

Education

New York University (NYU): **Physics**, **Computer Science** (Minor: Math) 2014-2018

Thomas Jefferson High School for Science and Technology (TJHSST) 2010-2014

Non-Technical Accomplishments:

- Helped successfully advocate management at Ouster for one, paid volunteer-day for employees
- Advocated and advised management at Ouster to donate $1k each to 6 Racial Justice Orgs
- Started Non-Profit (Project BEST) to engage MS students in STEM, over 2 years reached 3000+ students, 3 states, and 25+ chapters (2012-2014).