

Contact

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Top Skills

Docker Products
Web Development
Automation Studio

Publications

Do As I Can, Not As I Say:
Grounding Language in Robotic
Affordances

Interactive Multi-Robot Flocking
with Gesture Responsiveness and
Musical Accompaniment

Kyle Jeffrey

Software Engineer At Stout Agtech. Robotics Engineer, Full Stack
Software Engineer
San Francisco, California, United States

Summary

Hi I'm Kyle!

I recieved my degree in robotics where I did a Senior Thesis on simulating Milipede movements with cheap leg actuators (See Projects Below).

For 3 years I worked throughout Googles robotics departments, getting robots to pickup kitchens (<https://say-can.github.io/>), dance (<https://www.youtube.com/watch?v=UI6IKIHh-pQ>), and make music (<https://everydayrobots.com/thinking/experiments-and-explorations-robots-as-musical-instruments>).

After leaving Google, I've been working at Stout Industrial Technology, empowering Farmers with plant level data on their fields and improving their yield with our autonomous smart cultivator what uses AI vision to detect weeds in the field.

Experience

Stout Industrial Technology, Inc.

1 year 4 months

Senior Software Engineer

October 2023 - Present (11 months)

As a Senior Software Engineer I've worked with:

- SaltStack for Deploying versioned software stacks
- OS tooling and infrastructure for linux based IOT devices
- Dev OPS involving CI/CD on Gitlab
- React Native and Expo for Cross Platform Mobile App Development
- React for Web using Redux/React Router/React Query
- Python for API and file parsing
- AWS Cloud Management
- PLC development using Automation Studio

Software Engineer

May 2023 - October 2023 (6 months)

Salinas, California, United States

As a Software Engineer at Stout, I'm responsible for designing, developing, and maintaining web and mobile applications. I work with a team of engineers, designers, and product managers to create innovative solutions that help farmers grow more food with less resources.

X, the moonshot factory

Python Developer

November 2021 - January 2023 (1 year 3 months)

Mountain View, California, United States

Software engineer on The Impact Lab team in Everyday Robots. Primarily used Python to create data infrastructure and services to run on robots.

In one instance this involved turning robots into instruments: <https://everydayrobots.com/thinking/experiments-and-explorations-robots-as-musical-instruments>. Accomplishments included:

- Developed cloud infrastructure to replay a multiple robot service with graphic analysis.
- Improved speed of services by up to 1000% with runtime analysis of application, using the snakeviz runtime analyzer.
- ~2 peer reviewed code submissions a week.
- Developed CLI to run application and bash tmux program to configure environment, improving startup time by at least 300%.
- Created multiple scripts to configure and launch integration tests for large cloud reinforcement training programs.

FS Studio

Teleoperator - Tactician

May 2021 - November 2021 (7 months)

Mountain View, California, United States

Robotic Teleoperator: Tactician remotely controls a sophisticated robot using a Virtual Reality (VR) headset and controller. It involves a number of robotic manipulation tasks, comprising, but not limited to stacking various objects, folding towels, and moving objects around a room. See project here: <https://say-can.github.io/>

Accomplishments:

- Developed graphical interface for data collection tasks, improving collection rates by at least 30%.
- Created documentation and data tracking websites to review data collected.
- Developed JIRA ticket autogeneration scripts.

YektaSonics Inc.

Hardware Engineer

January 2019 - November 2019 (11 months)

Santa Cruz, California, United States

AgTech

Computer Engineer

January 2019 - November 2019 (11 months)

Santa Cruz, California, United States

Stood as head of hardware and software management for support of on campus project to bring ml models to agriculture to aid in understanding crop health.

Education

University of California, Santa Cruz

Bachelor's degree, Mechatronics, Robotics, and Automation

Engineering · (2016 - 2020)