

Ryan Bahl

Hire.Ryan.Bahl@gmail.com ❖ (650) 793 7259 ❖ Mountain View, CA ❖ Ryan.Bahl.com

SKILLED CANDIDATE FOR ROBOTIC SOFTWARE ENGINEER

- Adept at debugging and optimizing complex robotic and embedded systems for enhanced reliability.
- Proficient in Linux environments with expertise in containerization, virtualization, and deployment workflows.
- Proven ability to thrive in fast-paced environments while independently delivering impactful solutions.
- Extensive experience in systems development with languages including C++, Python, and GoLang.

WORK EXPERIENCE

Viabot

Mar. 2024 – Current

Robotic Software Engineer

Sunnyvale, CA

Develop point cloud filtering systems to support autonomy features for autonomous street-sweeping robots. Oversee software setup and mapping procedures for a dozen new robot deployments monthly, while developing new software suites and automation to streamline the process. Develop product-specific functionality on embedded Linux platforms to improve deployed robot reliability.

- Developed algorithms for classifying traversable space in large-scale LiDAR scans of parking lots for use in autonomous navigation, eliminating the need for outsourced scan processing, reducing deployment cost by 10%.
- Automated generation of 2D maps from LiDAR scans for use in autonomous robot path planning, cutting manual map generation time by 50%.
- Overhauled the embedded Linux software stack on deployed robots' modems, enabling remote recovery features that reduced technician visits by 30%.
- Produced clear documentation for rapid troubleshooting of newly deployed robots.

Xilinx

Jun. 2021 – Sep. 2021

IT Systems Engineer-Intern

San Jose, CA

Located and patched unsecured Unix- and Windows-based workstations with access to sensitive company data. Contributed to core datacenter teams as a technician.

- Eliminated security risks on over 50 engineering team's development servers as part of IT compliance.
- Developed Visual Basic scripts that identified security risks on internal company networks.

The Bike Connection

Aug. 2019 – Jul. 2020

Retail Salesperson

Palo Alto, CA

Ran front facing customer relations guiding customers through purchasing high end and specialized mountain, road, and electric bicycles. Managed technician schedules for bicycle maintenance and upgrades.

- Sold over 100 road bikes and 200+ mountain bikes.
- Managed work order scheduling for 1000+ bike repairs and upgrades.

Turntide Technologies (Formerly Software Motor Company)

May 2018 – Sep. 2018

Software Engineer-Intern

Sunnyvale, CA

Developed a comprehensive internal testing software for prototype stepper motors and infrastructure to hold and display prototype data.

- Architected a centralized data server for prototype motor data using MySQL.
- Produced a comprehensive suite of power and efficiency tests to gauge prototype performance.

EDUCATION

Baskin School of Engineering at University of California Santa Cruz

Sep. 2020 – Jun. 2022

BS, Computer Science

Santa Cruz, CA

- University Honor: Cum laude

Foothill College

Sep. 2017 – Jun. 2020

AA, Computer Science

Los Altos Hills, CA

CERTIFICATIONS

CKA: Certified Kubernetes Administrator

Sep. 25, 2023

- Issued by: The Linux Foundation

AWS Certified Cloud Practitioner

May 15, 2023

- Issued by: Amazon Web Services Training and Certification

EXTRACURRICULARS

FIRST Robotics, Team 971

Aug. 2015 – Jul. 2018

CAD Designer / Technician

Mountain View, CA

- Designed key parts in SolidWorks for competitive robots under tight deadlines.
- Manufactured parts with an in-house CNC router and HSMWorks CAM Software.
- Co-led a scouting team to gather data and qualitative notes on competitors' robots during competitions.

Eagle Scout, Troop 80

Sep. 2012 – Oct. 2017

Senior Patrol Leader / Eagle Scout Project Manager

Mountain View, CA

- Organized and led a clothing drive for the Miriam Jamison Children's Center.
- Ran a team of peers to distribute 2,500 fliers and collected an estimated 7,500 articles of clothing for children in emergency shelters in Kern County, CA.

SKILLS & INTERESTS

- | | | |
|----------|---------|-------------------|
| ▪ C++ | ▪ C# | ▪ Python |
| ▪ Java | ▪ Linux | ▪ Kubernetes |
| ▪ GoLang | ▪ Bash | ▪ Microsoft Excel |