Michael Jae-Yoon Chung

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SUMMARY

I'm a robotics software generalist who collaborates with others (e.g., working on robotics control/planning/perception, web development, devops, or product) to find and tackle high impact problems, vertically. That said, I'm interested in problems with scaling up robotic system deployments and challenges with programming or operating robotic systems.

EXPERIENCE

Senior Robotics Engineer
2020 – Present

Intrinsic/Vicarious (Vicarious was acquired by Intrinsic in May, 2022)
Seattle, WA (Remote)

- "Intrinsic is building an intelligent robotics platform"
- Led the effort to adopt service-oriented architecture on deployed robot applications and then collaborated to deliver human-machine interface integration, containerization, and application management command-line tools.
- Collaborated with grasping and control team (separately) to design, plan, and adopt service-oriented architecture on deployed components to improve application initialization/execution speed, robustness, and isolation.

Robotics Applications Engineer
2016 – 2018

Savioke
San Jose, CA

- Contributed to developing and maintaining backends for both on-board and desktop applications (e.g., a single- or multi-robot behavior management system) and support infrastructure (e.g., configuration and notification management systems) that were deployed to 50+ mobile robots.
- Deployed a non-roboticist-friendly robot programming system and used it for collaborating with partner companies including an airport management company in Southeast Asia.
- Explored new mobile robot applications using techniques adopted from product design research, which resulted in beta applications and academic publications.

Research Assistant
2018 – 2020 & 2011 – 2015

University of Washington
Seattle, WA

- Designed, built, and 3+ evaluated robot programming systems for non-roboticist developers with inspirations drawn from programming languages research and web development communities' work.
- Built and deployed end-to-end mobile robot and robot manipulator applications involving perception, planning and control, and UI components; evaluated the applications by conducting user studies.
- Communicated insights in 20+ publications and 10+ presentations at major robotics conferences.
- Recruited, trained, and mentored 14 undergraduate students and co-authored 5+ academic papers with 7 of them; two students started their own research projects which resulted in academic publications.

EDUCATION

Ph.D. Computer Science & Engineering, University of Washington (2020)

Master of Science Computer Science & Engineering, University of Washington (2013)

Bachelor of Science Computer Science, University of Washington (2010)

SKILLS

Knolwedge : Robotics Software Engineering/Architecture/Algorithms/Metrics, UI/UX Development, Developer Tooling, DevOps, Project Planning, Requirement Elicitation, User Research/Study

Tools : Programming Languages (e.g., Python, Javascript, C++, Go), Robotics Framework and Libraries (e.g., ROS, OpenCV), Web Development Frameworks and Libraries (React, ReactiveX, Node.js), Dev Tools (e.g., git, Dev Container)

Langauages : English (fluent), Korean (native)