# Hiroshi Yamamoto

Osaka, Japan

hiroshi.yamamoto@fakeemail.com | +81 80 1234 5678 | LinkedIn | GitHub

### **Education**

Osaka University

Master of Engineering in Robotics

Apr 2018 - Mar 2020 | Osaka, Japan

GPA: 3.92/4.0

Activities: Robotics Research Lab, Al Ethics Committee, International Robotics

**Competition Team** 

Relevant Coursework: Robot Kinematics, Control Systems, Computer Vision, Sensor

Fusion, Machine Learning for Robotics, Human-Robot Interaction, Mechanical Design

Bachelor's Degree: B.Eng. in Mechanical Engineering, Kyoto University, GPA: 3.85/4.0

## **Work Experience**

Robotics Software Engineer | FANUC Corporation | Apr 2020 - Present | Osaka, Japan

- Developed motion planning algorithms for industrial robots improving manufacturing efficiency by 27%.
- Created computer vision systems for bin picking and part identification with 98.5% accuracy.
- Implemented real-time control systems for collaborative robots ensuring human safety in shared workspaces.
- Designed simulation environments for testing robot performance reducing physical testing time by 60%.

#### Skills

Robotics: ROS/ROS2, Gazebo, Movelt, URDF/XACRO, Motion Planning, Forward/Inverse

Kinematics

Control: PID, MPC, Optimal Control, Kalman Filters, State Estimation, Path Planning

Vision: OpenCV, Point Cloud Library, Object Detection, 3D Reconstruction, SLAM

Programming: C++, Python, MATLAB, Embedded C

Hardware: Microcontrollers, Sensors (LiDAR, Camera, IMU), Actuators, Communication

### **Protocols**

Simulation: Gazebo, CoppeliaSim, Webots, Digital Twin Technologies

Other: RobotStudio, CAD (SolidWorks, Fusion 360), 3D Printing, Real-time Systems

## **Certificates**

ROS Certified Developer
FANUC Robot Programming Certification
Machine Vision Professional Certificate
TÜV Functional Safety Engineer

#### **Awards**

Best Industrial Automation Solution – Japan Robotics Forum 2023 Innovation Award – International Conference on Robotics and Automation 2022 First Place – Asian Robotics Competition 2021