

# RIWA KARAM

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[in linkedin.com/in/riwakaram/](https://www.linkedin.com/in/riwakaram/) | [riwakaram](https://github.com/riwakaram) | [riwakaram.github.io](https://github.com/riwakaram)  
Irvine, California

## OBJECTIVE

A highly motivated and ambitious computer engineer, with a vast imagination and a passion for robotics. Good teamwork and communication skills allow me to work well in groups. Open to opportunities that will help me grow in my field and expand my knowledge as well as my skill set, while enjoying the work and fueling my curiosity.

## INDUSTRY EXPERIENCE

- **ASML** [🌐] June 2024 - September 2024  
*Mechatronics and Control Systems Engineer Intern* Wilton, CT
  - Developed a Gaussian Process Regression (GPR) model to predict force generated by a piezo-electric actuator, which led to a pending patent
  - Enhanced baseline code for model training with various dataset sizes and visualization tools
  - Automated a MATLAB/Python script, reducing workflow from 40 hours to an overnight run
  - Investigated optimization problems and current-control hardware issues for test stands
  - Tools & Skills: Python, MATLAB, MS Excel, GPR, ML, convex optimization, electrical circuits, Sobol space-filled design of experiments, ASML machine software and software processes
- **AviaPro Consulting Inc.** [🌐] June 2022 - July 2023  
*Software Developer* Remote
  - Developed web applications and applied software DevOps practices
  - Contributed to multiple full stack web development projects as well as a solo full stack web dev project
  - Tools & Skills: HTML, JS, CSS, React.js, Node.js, Databases, Microsoft Tools

## ACADEMIC EXPERIENCE

- **University of California, Irvine** [🌐] September 2023 - PRESENT  
*Graduate Student Researcher* Irvine, CA
  - Conducting research in the field of multi-agent systems, control, optimization, and ecology robotics
  - Working on multiple projects based on formation control for multi-agent systems, computer vision, optimization, and quantum computing

## EDUCATION

- **University of California, Irvine** [🌐] September 2023 - PRESENT  
*Electrical & Computer Engineering, Direct MS/PhD* Irvine, CA
  - GPA: 3.93/4.00
  - Lab: Robot Ecology, Advisor: Professor Magnus Egerstedt
  - Expected Graduation Date: June 2028
- **University of Balamand, Al-Kurah** [🌐] August 2020 - June 2023  
*Computer Engineering, Bachelor of Science* Balamand, Al-Kurah, Lebanon
  - GPA: 3.90/4.00
  - Computer Engineering Class of 2020 Valedictorian

## SKILLS

- **Programming Languages:** MATLAB, Python, C, Java, Shell Scripting, C#
- **Other Tools & Technologies:** Git, LaTeX, Simulink, Colab, VS Code, Unity, Microsoft Tools, Google Tools
- **Soft Skills:** Research, Time Management, Written and Verbal Communication, Critical Thinking

## HONORS, AWARDS, AND CERTIFICATIONS

- **ZAKA AI Bootcamp** September 2023  
ZAKA [🌐]
- **Faculty Award for Academic Excellence** July 2023  
*University of Balamand, Faculty of Engineering* [🌐]
- **First Place Winner (1st out of 12 teams), Lebanon IoT & AI Challenge 2021** November 2021  
*Arab IoT & AI Challenge* [🌐]
- **Dean's Honor List** August 2020 - June 2023  
*University of Balamand, Faculty of Engineering* [🌐]

## ADDITIONAL INFORMATION

**Languages:** Arabic (Native Language), English (High Proficiency), French (High Proficiency)

**Interests:** technology, volleyball, ping-pong, gymnastics, swimming, surfing, board games, reading, watching movies

*References Available Upon Request*