

Abhay Gupta

ab18gu@gmail.com • <http://linkedin.com/in/abgup> • <https://github.com/ab12gu>

Current: [Seattle, WA 98104](#)

Portfolio: abgup.com

U.S. Citizen

INDUSTRY EXPERIENCE

Kawasaki Robotics SW Engineer, Robotics	<ul style="list-style-type: none">Develop software to move wafer handling (scara) robotsUtilize internal communication protocols, such as TCP/IP, to test and deploy software on industrial manufacturing robots AS - Domain Specific Language	Jun 2022 - Aug 2022
SummerBio SW Engineer, Robotics	<ul style="list-style-type: none">Develop software drivers (6 DOF arms, benchtop systems) for VWorksUse serial and ethernet communication protocols to deploy and validate software on hardwareDevelop software with a common test driven framework in C sharp C# Figma OnShape	Oct 2021 - Feb 2022
Lam Research SW/ME Engineer 1y6m	<ul style="list-style-type: none">Develop software and mechanical components to optimize a 6 DOF robotic armLead and assist Android app developmentCommunicated with hardware via Modbus, TCP/IP, UDP, etc. C# JavaScript Python VBA Figma NX Teamcenter	May 2020 - Oct 2021
CSAA Insurance Physics Consultant 2y	<ul style="list-style-type: none">Evaluated novel engineering and physics aspects for patent applicationsResearched alternative approaches for products and methods	Oct 2018 - Oct 2020

PUBLICATIONS & PATENTS

Automobile Damage Detection Using Thermal Conductivity		Dec 2018
J. Schow, and A. Gupta (US Patent)		
A Cellular Automaton for Modeling Non-Trivial Biomembrane Ruptures		Sep 2018
A Gupta, G. Reint, I. Gozen, and M. Taylor (Published in <i>Soft Matter</i>)		
<hr/>		
Certifications:	Engineer-In-Training, State of CA	May 2018
	Solidworks CSWA	Mar 2015

VOLUNTEERING ACTIVITIES

San Jose Bicycle Clinic & The Bikery, Seattle , Bicycle Technician	Jul 2020 - Present
FIRST Robotics Competition (FRC) 254, 5940 & 4180, Engineering Mentor JAVA , Onshape , SolidWorks	Aug 2021 - Present
Reddit Group: r/ControlTheory , Moderator	Dec 2018 - Present

EDUCATION

University of Washington	M.S. Robotics & Data Science <ul style="list-style-type: none">Thesis - 3D Graphics & Regression Models 3.6Advisors: Steve Brunton & Ashis Banerjee Python MATLAB C++ OpenGL ROS	Sep 2018 - Dec 2019
Santa Clara University	M.S. Computer Engineering <ul style="list-style-type: none">Half Completed Transferred to University of Washington 3.8 B.S. Mechanical Engineering <ul style="list-style-type: none">Entrepreneurship minor Graduated in 3 years with honors 3.6 MATLAB L^AT_EX C Simulink LabVIEW Maple SolidWorks Abaqus Star-CCM+ Lathe Mill Oscilloscopes	Sep 2017 - Jun 2018 Sep 2014 - Sep 2017

INTERNSHIPS || 2y

Microvision SDE Intern 3m	<ul style="list-style-type: none">Modeled the response of Lidar activated SiPM (Silicon photomultipliers) Simulink MATLAB	Summer 2019
TheraNova SDE Intern 3m	<ul style="list-style-type: none">Developed a python software analysis system to understand gait measurementsEnsured the software analysis is accurate for 80+ patients Python MATLAB	Summer 2018
Valeo Systems Engr Intern 3m	<ul style="list-style-type: none">Produced hardware and software demos for automotive OEMsCollaborated with start-ups and OEMs to develop new cabin safety features VBA	Spring 2018
Pentair ME/EE Intern 7m	<ul style="list-style-type: none">Optimized performance of steady state and transient phases of circuit breakersLaboratory tested and simulated rail heating to melt snow Ansys CFX Solidworks Oscilloscopes , Function Generators , DC/AC Power Supplies , Soldering	Winter 2017

Accel Biotech
ME Intern || 3m

- Prototyped medical device components and test assemblies
- Supported mechanical, electrical, and software design of a blood diagnostic device

[SolidWorks](#)

[Oscilloscopes](#)

Summer 2016

Caltrans
ME Intern || 3m

- Reviewed and advised on structural testing for next generation locomotives
- Designed a floor plan using [Microsoft Visio](#) & participated in vendor meetings

Summer 2015