

Abhay Gupta

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Current: Palo Alto, CA 94303

Portfolio: abgup.com

U.S. Citizen

INDUSTRY EXPERIENCE

SummerBio SW Engineer, Robotics	<ul style="list-style-type: none">Develop software drivers (6 DOF arms, benchtop systems) for VWorks C#	Oct 2021 - Present
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 development C# JavaScript Python VBA 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 (Part-time)

PUBLICATIONS & PATENTS

Automobile Damage Detection using Thermal Conductivity J. Schow, and A. Gupta (US Patent)		Dec 2018
A Cellular Automaton for Modeling Non-Trivial Biomembrane Ruptures A Gupta, G. Reint, I. Gozen, and M. Taylor (Published in <i>Soft Matter</i>)		Sep 2018

Certifications:	Engineer-In-Training, State of CA	May 2018
	Solidworks CSWA	Mar 2015

VOLUNTEERING ACTIVITIES

San Jose Bicycle Clinic , Bicycle Technician		Jul 2020 - Present
FIRST Robotics Competition (FRC) , Engineering Mentor		Aug 2021 - Present
Reddit Group: r/ControlTheory , Moderator		Dec 2018 - Present

EDUCATION

University of Washington	M.S. Robotics & Controls Engineering <ul style="list-style-type: none">PhD dropped Thesis - 3D Graphics & Regression Models 3.6 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 SWE Intern 3m	<ul style="list-style-type: none">Modeled the response of Lidar activated SiPM (Silicon photomultipliers) Simulink MATLAB	Summer 2019
TheraNova SWE 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	<ul style="list-style-type: none">Prototyped medical device components and test assembliesSupported mechanical, electrical, and software design of a blood diagnostic device SolidWorks Oscilloscopes	Summer 2016
Caltrans ME Intern 3m	<ul style="list-style-type: none">Reviewed and advised on structural testing for next generation locomotivesDesigned a floor plan using Microsoft Visio & participated in vendor meetings	Summer 2015