Abhay Gupta

ab18gu@gmail.com • http://linkedin.com/in/abgup • https://github.com/ab12gu
Current: Milpitas, CA 95035
Portfolio: abgup.com
U.S. Citizen

INDUSTRY EXPERIENCE

Lam Research — May 2020 - Present
Robotics Engineer || 1y+
- Develop software and mechanical components to optimize a 6 DOF robotic arm
- Lead and assist Android app development

C# || JavaScript || Python || VBA — NX || Teamcenter

CSAA Insurance — Oct 2018 - Oct 2020 (Part-time)
Physics Consultant || 2y
- Evaluated novel engineering and physics aspects for patent applications
- Researched alternative approaches for products and methods

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 *Soft Matter*)

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 — Sep 2018 - Dec 2019
M.S. Robotics & Controls Engineering
- PhD dropped || Thesis - 3D Graphics & Regression Models || 3.6

Python || MATLAB || C++ — OpenGL || ROS

Santa Clara University — Sep 2017 - Jun 2018
M.S. Computer Engineering
- Half Completed || Transferred to University of Washington || 3.8

Sep 2014 - Sep 2017
B.S. Mechanical Engineering
- Entrepreneurship minor || Graduated in 3 years with honors || 3.6

MATLAB || LaTeX|| C || Simulink || LabVIEW || Maple — SolidWorks || Abaqus || Star-CCM+
Lathe || Mill — Oscilloscopes

INTERNSHIPS || 2y

Microvision — Jun 2019 - Aug 2019
SWE Intern || 3m
- Modeled the response of Lidar activated SiPM (Silicon photomultipliers)

Simulink || MATLAB

TheraNova — Jun 2018 - Sep 2018
SWE Intern || 3m
- Developed a python software analysis system to understand gait measurements
- Ensured the software analysis is accurate for 80+ patients

Python || MATLAB

Valeo — Apr 2018 - Jun 2018 (Part-time)
Systems Engr Intern || 3m
- Produced hardware and software demos for automotive OEMs
- Collaborated with start-ups and OEMs to develop new cabin safety features

VBA

Pentair — Sep 2017 - Mar 2018
ME/EE Intern || 7m
- Optimized performance of steady state and transient phases of circuit breakers
- Laboratory tested and simulated rail heating to melt snow

Ansys CFX || Solidworks
Oscilloscopes, Function Generators, DC/AC Power Supplies, Soldering

Accel Biotech — Jun 2016 - Sep 2016
ME Intern || 3m
- Prototyped medical device components and test assemblies
- Supported mechanical, electrical, and software design of a blood diagnostic device

SolidWorks — Oscilloscopes

Caltrans — Jul 2015 - Sep 2015
ME Intern || 3m
- Reviewed and advised on structural testing for next generation locomotives
- Designed a floor plan using Microsoft Visio & participated in vendor meetings