Abhay Gupta

ab18gu@gmail.com • http://linkedin.com/in/abgup • (916) 792-7682
Current: Folsom, CA 95630
Portfolio: abgup.com
U.S. Citizen

EDUCATION

University of Washington — M.S. Robotics & Controls — Sep 2018 - Dec 2019
- Thesis: Graphical modeling of Optical Tweezers & Regression Models || 3.6

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

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

SKILLS

Software: Programming: ML, Python, C/C++, ROS, Matlab, OpenGL, Git, Maple, LabVIEW, Simulink, LaTeX
Design/Analysis: Ansys CFX, Star CCM+, SolidWorks, Abaqus, Autodesk Inventor

Hardware: Mechanical: Lathe, Mill, Laser Cutting, 3D Printing
Electrical: Oscilloscopes, Function Generators, DC/AC Power Supplies, Soldering

Certifications: Engineer-In-Training, State of CA [05/18]
Solidworks CSWA [03/15]

INDUSTRY EXPERIENCE

CSAA Insurance
Physics Consultant
- Evaluated novel engineering and physics aspects for patent applications
- Researched alternative approaches for products and methods

Sep 2018 - Dec 2018 (Part-time)

TheraNova
R&D Engineering Intern
- Developed a python software analysis system to understand gait measurements
- Ensured the software analysis is accurate for 80+ patients

Jun 2018 - Sep 2018

Valeo
Systems Engineering Intern
- Produced hardware and software demos for automotive OEMs
- Collaborated with start-ups and OEMs to develop new cabin safety features

Apr 2018 - Jun 2018

Pentair
R&D Engineering Intern
- Optimized performance of steady state and transient phases of circuit breakers
- Laboratory tested and simulated rail heating to melt snow through Ansys CFX

Sep 2017 - Mar 2018

Accel Biotech
Mechanical Engineering Intern
- Prototyped medical device components and test assemblies
- Supported mechanical, electrical, and software design of a blood diagnostic device

Jun 2016 - Sep 2016

Caltrans
Engineering Intern
- Reviewed and advised on structural testing for next generation locomotives
- Designed a floor plan using Microsoft Visio & participated in vendor meetings

Jul 2015 - Sep 2015

PUBLICATIONS & PATENTS

Automobile Damage Detection using Thermal Conductivity — Dec 2018
J. Schow, and A. Gupta (Patent Pending)

A Cellular Automaton for Modeling Non-Trivial Biomembrane Ruptures — Sep 2018
A Gupta, G. Reint, I. Gozen, and M. Taylor (Published in *Soft Matter*)

PROFESSIONAL AFFILIATIONS & ACTIVITIES

Numerical Analysis Research Club, (NARC). Graduate Student Member — Sep 2018 - Dec 2019

Association of Graduate Engineering Students, (AGES). Co-founder and Student Chapter President — Sep 2017 - Jun 2018

American Society of Mechanical Engineers, (ASME). Student Chapter President — Sep 2014 - Jun 2017