Abhay Gupta

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Current: Folsom, CA 95630
Portfolio: abgup.com
U.S. Citizen

EDUCATION

University of Washington	M.S. Mechanical Engineering	Sep 2018 - Dec 2019
	• Thesis: Graphical modeling of Optical Tweezers & Regression Models ‖ 3.6	
Santa Clara University	M.S. Computer Engineering (18 units completed)	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

Microvision System Modelling Intern	• Modeled the response of Lidar activated SiPM (Silicon photomultipliers) through Simulink	Sep 2019 - Aug 2019
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 J. Schow, and A. Gupta (Patent Pending)	Dec 2018
A Cellular Automaton for Modeling Non-Trivial Biomembrane Ruptures A Gupta, G. Reint, I. Gozen, and M. Taylor (Published in *Soft Matter*)	Sep 2018

PROFESSIONAL AFFILIATIONS & ACTIVITIES

Numerical Analysis Research Club, (NARC). Graduate Student Member	Sep 2018 - Dec 2019
American Society of Mechanical Engineers, (ASME). Student Chapter President	Sep 2014 - Jun 2017