Abhay Gupta

ab18gu@gmail.com • http://linkedin.com/in/abgup • (916) 792-7682
Permanent: Folsom, CA 95630
Current: Seattle, WA 98105
U.S. Citizen || abgup.com

EDUCATION

University of Washington — Ph.D. Control and Dynamical Systems — Sep 2018 - Dec 2022
- Thesis: Model Predictive Control of Learned Stochastic Dynamical Systems

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

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

SKILLS

Languages: Python, C/C++, Matlab, HTML/CSS, ROS, Maple, LabVIEW, Simulink, LaTeX

Software: CFD: Ansys CFX & Star CCM+
Design/FEA: SolidWorks, Abaqus, Autodesk Inventor
Git, Microsoft Office Suite (SharePoint, Excel, Word, PowerPoint, Visio)

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 — Sep 2018 - Present
- Evaluate novel engineering and physics aspects for patent applications
- Research alternative approaches for products and methods

TheraNova
R&D Engineering Intern — Jun 2018 - Sep 2018
- Developed a python software analysis system to understand gait measurements
- Ensured the software analysis is accurate for 80+ patients

Valeo
Graduate Engineering Intern — Apr 2018 - Jun 2018
- Produced hardware and software demos for automotive OEMs
- Collaborated with start-ups and OEMs to develop new cabin safety features

Pentair
R&D Engineering Intern — Sep 2017 - Mar 2018
- Optimized performance of steady state and transient phases of circuit breakers
- Laboratory tested and simulated rail heating to melt snow through Ansys CFX

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

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

PUBLICATIONS & PATENTS

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

A Cellular Automaton for Modeling Non-Trivial Biomembrane Ruptures — Sep 2018
A Gupta, G. Reint, I. Gozen, and M. Taylor (Publication under review in Nanoscale Journal)

PROFESSIONAL AFFILIATIONS & ACTIVITIES

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

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