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**Abhay Gupta**

Permanent: Folsom, CA 95630 Current: Seattle, WA 98105

U.S. Citizen || [abgup.com](http://abgup.com/)

# EDUCATION

**University of Washington** PhD - Robotics & Controls (Leave of Absense)

### Advised by Ashis Banerjee and Steve Brunton

* Studied applied machine learning/controls on optical tweezers

**Santa Clara University** M.S. Computer Engineering (Incomplete)

* Transferred to University of Washington || 3.8

### B.S. Mechanical Engineering

* Entrepreneurship minor || Graduated in 3 years with honors || 3.6

Sep 2018 - Dec 2019

Sep 2017 - Jun 2018

Sep 2014 - Sep 2017

# SKILLS

Software: Programming: 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

## 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)

**A Cellular Automaton for Modeling Non-Trivial Biomembrane Ruptures**

A Gupta, G. Reint, I. Gozen, and M. Taylor (Published in *Soft Matter*)

PROFESSIONAL AFFILIATIONS & ACTIVITIES

**Numerical Analysis Research Club**, (NARC). Graduate Student Member

**Association of Graduate Engineering Students**, (AGES). Co-founder and Student Chapter President

**American Society of Mechanical Engineers**, (ASME). Student Chapter President

Dec 2018

Sep 2018

Sep 2018 - Dec 2019

Sep 2017 - Jun 2018

Sep 2014 - Jun 2017