

EDUCATION

Bioinnovation PhD, Tulane University

2014 - Present

- ◆ Completed 3 Requisite Rotations
 - Therapeutics: Optimized fast imaging technology in postoperative tumor margin assessment and partially built the Selective Plane Illumination Microscopy (SPIM).
 - Biosensors: Developed module and extracted EEG data to monitor and assess stress and concentration levels during surgery producing two papers from results.
 - Regenerative Medicine: Promoting neuron growth through focused and unfocused ultrasound and determining growth mechanisms.

Bachelor of Science, University of California, Santa Cruz

2008 - 2011

- ◆ Bioengineering, Rehabilitation Concentration
- ◆ Thesis: Wireless Electromyography Amplifier for Lower Limb Exoskeleton

RESEARCH EXPERIENCE

Junior Specialist, Post-baccalaureate Research Education Program,

2013 - 2014

University of California, Santa Cruz, Genome Sequencing Center

- ◆ Optimized and automated library preparation protocols for Next Generation Sequencing.
- ◆ Increased reproducibility by 80% and improved time preparation by 120%.

Junior Development Engineer & Summer Research Training Program,

2011

University of California, San Francisco, San Francisco, California

- ◆ Developed a wireless non-implantable/implantable FDA approved medical device to correct the current surgical treatment for pectus carinatum.

Research Assistant,

2010

Plantronics, Santa Cruz, California

- ◆ Design and testing of a new Bluetooth headset technology for the Department of Human Computer Interaction.

Undergraduate Research Assistant,

2008 - 2011

University of California, Santa Cruz, Santa Cruz, California

- ◆ Minimized interacting forces between the user and the upper limb exoskeleton with a developed graphical user interface for clinical research and optimized the gait cycle of the lower limb exoskeleton (LEX) through simulations with motion capture data.
- ◆ Senior Thesis: Developed a wireless electromyography amplifier for the user wearing the LEX to show the position of the lower limb relative to LEX.

PROFESSIONAL EXPERIENCE

Student Research Presentations Programs Manager,

2011 - 2013

Society for Advancing Hispanics/Chicanos and Native Americans in Science (SACNAS), Santa Cruz, California

- ◆ Co-organize Community Day that brought 500 Bay Area local students from 15 high schools for a day of STEM field focused hands-on activities and workshops.
- ◆ Organize the SACNAS 2012 Summer Leadership Institute (SLI), in collaboration with the American Association for the Advancement of Science that offers unparalleled training for postdoctoral and professional underrepresented minority scientists interested in advancing their leadership skills.
 - Increased applicant interest by 107%.
- ◆ Organize and coordinate 1,000 student presentations and over 1,900 abstracts at the annual SACNAS National Conferences
 - Increasing abstract and mentor reviewers by 95%.
- ◆ Manage sponsorship and government funding for the 2012 SLI and student research presentations.

PROGRAMMING LANGUAGES

- ◆ C, C++, Matlab, SAS, Latex (intermediate)
- ◆ Python, Java, Perl, R (novice)