gargp@mit.edu (850) 346-2971

EDUCATION

Massachusetts Institute of Technology (MIT) Cambridge, Massachusetts

Candidate for Bachelor of Science in Mechanical Engineering with a focus in Biological Engineering

June 2015

Pensacola High School Pensacola, Florida

International Baccalaureate (IB) & High School Diplomas w/ Highest Honors GPA: 5.26/4 Valedictorian

May 2011

EXPERIENCE

Biomechatronics Group at MIT Media Lab Cambridge, Massachusetts

Undergraduate Researcher

Mar 2012 - Present

- Developing Python-based program to interface the control of motion-capture software and other sensors for a novel ankle prosthesis automatic adjustment system.
- Conducting human motion-capture trials for data collection on amputee subjects.

Griffith Lab at MIT Cambridge, Massachusetts

Nov 2011 – Mar 2012

Undergraduate Researcher

Investigated alternate expression pathways to increase purity of a protein involved in optimizing the binding of mesenchymal stromal cells to scaffolds that promote cell growth when placed in large segmental bone fractures.

Institute for Human and Machine Cognition Pensacola, Florida

Jun 2010 – Apr 2011

- Intern
 - Co-Created *techConnect*, an ongoing program to promote engagement in technology in elementary-age students. Co-directed ScratchThat!, the first effort of techConnect, by designing engagement strategies, materials, and a curriculum
 - to teach Scratch (an elementary programming language). Instructed test group of 15 students in an at-risk area and led weekly Scratch Club sessions the year following.
 - Developed a website to host curriculum and other materials: http://www.ihmc.us/groups/techconnect/.

Pensacola Invitational (PI) Math Competition Pensacola, Florida

Jun 2010 – Mar 2011

Co-Organizer

- Promoted youth engagement in mathematics by organizing a middle-school math competition with a classmate. 75 students competed, and there were approximately 30 combined judges, volunteers, and speakers
- Managed event logistics such as coordinating with the county and school administration, securing a location, fundraising \$1000, creating test materials, and providing refreshments/lunch.

Physics Department at the University of West Florida Pensacola, Florida Intern

Mar 2010 – Nov 2010

- Examined liquid crystals' behavior near three phase transitions under varying input voltage and frequency using LabView.
- Co-contributor of "Investigation of Dielectric Properties of Liquid Crystals Near Phase Transitions" (presented at 2010 International Liquid Crystals Conference in Krakow) and finalist at Intel® International Science & Engineering Fair.

LEADERSHIP AND ACTIVITIES

MIT Society of Women Engineers (http://www.swe.mit.edu)

Event Outreach Co-Chair

Feb 2012 - Present

Contributing to all outreach programs organized by MIT SWE.

MIT Techfair (http://www.techfair.mit.edu)

Logistics Committee Member, Techtalks Committee Member

Oct 2011 - Present

Led organization of Techfair Banquet. Coordinated with tech speakers, caterers, facilities, custodial services and hotels to organize fair and associated events.

Pensacola High School Robotics Club

Founder, President (2009 – 11), Engineering Notebook Project Leader (2009 – 11)

Aug 2009 - May 2011

Recruited members, fundraised, and led our club to participate in two competitions: BEST Robotics and the USA Electrathon.

SKILLS AND INTERESTS

Computer Proficient: Python, Microsoft Office Suite (Word, Excel, PowerPoint, Publisher). Working Knowledge: Java, LabView Languages English, Hindi (conversationally fluent), Spanish (basic)

Interests Healthcare Reform, Large Event Planning, Hiking, Creative Writing, Soccer, Traveling