Arvind Srikanth

352-219-0546
arvindsrikanth1992@gmail.com

Objective

To excel in a challenging work environment and to employ my interdisciplinary knowledge in programming, physics, chemistry and electrical engineering. I enjoy solving problems, explaining my process and communicating difficult topics through examples and theory.

Education

University of Florida / Masters of Science

December 2019, Gainesville, FL

Materials Science and Engineering

University of Illinois at Urbana Champaign / Bachelors of Science

December 2014, Champaign, IL

Materials Science and Engineering - Electronic Materials and Polymer Science

Research

University of Florida / Dr. Simon Phillpot

January 2019 - December 2019, Gainesville, FL

Worked to develop a multiscale physics model to understand the thermomechanical properties of desirable aerospace materials for atmospheric re-entry. Performed atomistic MD simulations on graphene fibers in LAMMPS to gain insight into the atomic level thermomechanical behavior. Developed code in python to analyze systems of 50,000 to 100,000 atoms.

University of South Florida / Dr. Robert Hoy

June 2013 - August 2013, Tampa, FL

Involved in an REU program: in soft matter systems we observe complex thermal and mechanical responses, specifically associating polymer systems (APs) offer great potential as tunable energy storage materials. In this study we explored the mechanical properties of glassy associating polymers systems through atomistic simulations in LAMMPS. Utilized code written in python and Fortran for data analysis.

University of Illinois at Urbana Champaign / Dr. Dallas Trinkle

August 2011 - December 2013, Champaign, Illinois

High entropy alloy systems show vast potential as tunable material systems and have not been fully explored. With Dr. Trinkle I performed atomistic MD simulations in LAMMPS to understand the mechanical properties of novel high-entropy alloy systems.

Awards

- Chairsann S. Froberg Scholarship - 2010
- Phi Kappa Sigma Scholarship - 2013
- Excellence in poster presentation USF AP REU - 2014

Work Experience

University of South Florida/ Research Assistant

January 2015 - August 2015, Gainesville, FL

Continued on after finishing bachelors to a former P.I. to continue work on previous projects involving simulations on complex polymer systems and data analysis. Algorithms developed in FORTRAN and C++.

University of Florida / Research Assistant

August 2018 - June 2020, Gainesville, FL

Continued work with my P.I. at the University of Florida. Molecular dynamics simulations were performed on carbon fiber systems to better understand the thermomechanical properties under extreme physical conditions.

Abstract Audioworks LLC / Owner & Audio Engineer

August 2019 - PRESENT, Gainesville, FL

Started off debugging computers, eventually moved towards providing audio solutions to clients. Services rendered included equipment repair/debugging, audio engineering (recording, mixing, mastering) & live sound.

Heartwood Soundstage / Audio Technician

August 2019 - March 2020, Gainesville, FL

Worked in projects related to audio engineering: live sound, troubleshooting hardware, recording engineering. Developed relationships with the local music community in Gainesville, FL.

Formaggios Wine Bar and Bistro / Server & Bartender

August 2017 - May 2021 Gainesville, FL

Worked in the front of house in a small family owned wine bar & bistro. Opened, closed, register experience. Greeted patrons, seated, served. Ensured a high quality dining experience for patrons.

Hoggetown Ale Works / Brewing Specialist

August 2020 - August 2021, Gainesville, FL
Retail and brewing help at the local home-brewing store. Assisted customers in purchasing supplies and in the science of beer brewing.

Satchels Pizza / Server & Bartender

May 2021 - January 2024, Gainesville, FL

Worked in the front of the house to ensure a pleasurable experience at one of Gainesvilles staple restaurants. Worked in a very fast paced environment with strong communication skills and a positive attitude.

Leadership

Phi Kappa Sigma International Fraternity / President

During my term as the president of the Rho chapter of the Phi Kappa Sigma fraternity as the face of the fraternity of the University council. Saw an increase in active membership from 22 to 40 members.

Phi Kappa Sigma International Fraternity / Academic Chair

Created study groups for like majored members, created academic incentives, managed academic probation rules within the chapter. Saw a cumulative GPA increase from 2.94 to 3.12 through my term.

Skills

Programming Languages: Fortran, Python, C++, CSound, HTML

Softwares: Microsoft Office Suite, MATLAB, Mathematica, Ableton Live, Logic Pro X, Reaper, LAMMPS, MAX/MSP, pureData

Technical: equipment testing, soldering, hot air rework, failure analysis

- Strong numerical analysis and algorithm development skills
- Strong verbal and written communication skills
- Linux Proficiency

Publications and Presentations

1. Nonlinear Mechanics of Thermoreversible Associating Dendrimer Glasses
   A. Srikanth, R.S. Hoy, B.C. Rinderspacher, J.W. Andzelm
   Physical Review E 88 (4), 042607
2. Competing Polarization Reversal Mechanisms in Ferroelectric Nanowires
   K. McCash, A. Srikanth, I. Ponomareva
   Physical Review B 86 (21), 214108
3. Nonlinear Mechanics of Thermoreversible Associating Dendrimer Glasses
   APS March Meeting 2015, Denver, CO