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EDUCATION

FLORIDA STATE UNIVERSITY

PHD IN SCIENTIFIC COMPUTING

Expected May 2019 | Tallahassee, FL

Cum. GPA: 3.962/4.0

Advisor: Dr. Anke Meyer-Baese

THE UNIVERSITY OF AKRON

MSC IN PHYSICS

Aug 2015 | Akron, OH

Cum. GPA: 3.982/4.0

Advisor: Dr. Alper Buldum

UNIVERSITY OF TEHRAN

BSC IN PHYSICS

Aug 2010 | Tehran, Iran

Cum. GPA: 3.1/4.0

Advisor: Dr. Hamidreza Moshfegh

COURSEWORK

FLORIDA STATE UNIVERSITY

Data Mining

Applied Machine Learning

Scientific Programming With C++

Applied Computational Science I

Applied Computational Science II

Advanced SAS Programming

Data Management & Analysis With SAS

Scientific Visualization (OpenGL-VTK)

THE UNIVERSITY OF AKRON

MATLAB Modeling & Simulation

NanoScience & Nano Technology

Electrodynamics

Quantum Mechanics

Lagrangian Mechanics

Solid State Physics

Statistical Mechanics

Mathematical Methods in Physics

Atomic Force Microscope (AFM) LAB

SKILLS

Fluent:

Python • C++ • SAS • SQL • \LaTeX

Proficient:

Fortran • C • Matlab • MPI • OpenMP

Experienced:

R • SAS IML • HTML • Java Script

SOCIETIES

APS • SPIE • IEEE

TEACHING EXPERIENCE

FLORIDA STATE UNIVERSITY | GRADUATE TEACHING ASSISTANT

August 2015 – Present | Tallahassee, FL

- Working with **Programs in Interdisciplinary Computing (PIC)** at Florida State University under supervision of Mr. Ken Armstrong as an Instructor for Spreadsheets in Business (CGS 2518).

THE UNIVERSITY OF AKRON | GRADUATE TEACHING ASSISTANT

August 2013 – August 2015 | Akron, OH

- Worked in Physics (I, II) LABS
- Instructor for Physics Life Science
- Grader for Astro-Physics & Classical Physics (I, II)

RESEARCH

FLORIDA STATE UNIVERSITY

August 2015 – Present | Tallahassee, FL

Working on a Data Mining Project under supervision of **Dr. Anke Meyer-Baese** to apply Machine Learning algorithms on fMRI Brain scans. I am working on Deep Learning algorithms such as Convolutional Neural Networks (CNN) to automated detection of predictive features for relapse in nicotine dependent subjects.

THE UNIVERSITY OF AKRON

August 2013 – August 2015 | Akron, OH

Worked with **Dr. Alper Buldum** for two years. My Thesis topic was Fluid Flow Through Carbon Nanotubes & Graphene Based Nanostructures. We implemented a Molecular Dynamics code written in Fortran for three different models, containing Single-Walled Carbon Nanotubes, Graphene Wall as structures, and Liquid Argon as flow of the system. The application of that would be found in the field of Drug Delivery.

AWARDS

- 2017 Florida State University Congress of Graduate Students Travel Grant
- 2017 SPIE Travel Grant, Department of Scientific Computing
- 2017 PhD Candidacy Exam (Score: 95.1%), Department of Scientific Computing
- 2016 Florida State University Congress of Graduate Students Travel Grant
- 2016 1st Place in [XSEDE2016] Data Simulation & Modeling Contest
- 2016 [XSEDE2016] Travel Grant, Texas Advanced Computing Center (TACC)
- 2015 Dean's Scholarship, Florida State University
- 2014 Annual Outstanding MS Academic Achievement, The University of Akron
- 2013 Annual Outstanding MS Academic Achievement, The University of Akron
- 2013 Graduate Teaching Assistantship, The University of Akron

CERTIFICATIONS

- 2016 SAS Certified Advanced Programmer for SAS 9 License: AP018225v9
- 2016 SAS Certified Base Programmer for SAS 9 License: BP060504v9
- 2016 Coursera R Programming License: In Progress
- 2016 Coursera The Data Scientist's Toolbox License: ZW45KTLYBXX5

PROJECTS

- 2017 Raspberry Pi Based Pattern Recognition
- 2017 Neuroimaging in Python
- 2017 fMRI Smoking Cessation Classification
- 2016 **Fluid Flow Through Graphene Based NanoStructures**
- 2016 [XSEDE2016] Competition: Modeling for Zombie Apocalypse
- 2016 [XSEDE2016] Competition: Modeling for Malaria Transmission Dynamics
- 2016 [XSEDE2016] Competition: Pharmacokinetic Modeling of Drug Dosage
- 2015 Space-Filling Curves
- 2015 Discrete Cosine Transformations - How JPEGs work

PUBLICATIONS

- 2017 Decision Tree Classifiers For fMRI Smoking Cessation Analysis, Elsevier Expert Systems With Application.
- 2017 fMRI Smoking Cessation Classification: an Evolutionary Approach, IEEE Congress on Evolutionary Computation.
- 2017 Dynamical Graph Theory Networks Techniques for the Analysis of Sparse Connectivity Networks in Dementia, SPIE Digital Library. Vol. 10216.
- 2017 Reconfigurable wearable to monitor physiological variables and movement, SPIE Digital Library. Vol. 10216.
- 2017 The Driving Regulators of the Connectivity Protein Network of Brain Malignancies, SPIE Digital Library. Vol. 10216.
- 2015 Fluid Flow Through Carbon Nanotubes & Graphene Based Nanostructures, **Diss. University of Akron.**
- 2015 Fluid Flow Calculations of Graphene Composites, **APS March Meeting Abstracts. Vol. 1.**