Connor Robertson

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Education

PhD - Applied Mathematics

New Jersey Institute of Technology

B.S. - Applied and Computational Mathematics

Brigham Young University

August 2018 - Present

August 2011 - May 2018

Research Experience

Cofounder - Coventina LLC - Provo, Utah

March '18 - December '18

Developed statistics and machine learning toolkit used to forecast water main breaks for public works departments. Research and development comprised of data collection, cleaning, imputation, regression analysis, model building and validating

Research Assistant - Brigham Young University - Provo, Utah

March '17 - May '18

Undergraduate research team focused on applying new mathematical concepts to problems in society and industry. Projects include: Use of Markov Chains for facility location problems in operations research and utilizing data science tools in optimizing improvements in water access in developing countries

Project Assistant - Brigham Young University - Provo, Utah

September '17 - May '18

Editing and writing academic programming assignments in Python and managing lab computer and servers. Assignments include curriculum on: Web Scraping, Serialization, NoSQL DBMS, parallel processing techniques, quasi-newton optimization, and numerical Arnoldi method for eigenvalue and eigenvector computation

Teaching Experience

Teaching Assistant - New Jersey Institute of Technology - Newark, New Jersey

Math 111 - Calculus I

Math 238 - General Calculus II

Conference Participation

Poster: Aligning Self-Propelling Particles in Non-Trivial Domains

March 2018

Frontiers in Applied and Computational Mathematics - Newark, New Jersey

Talk: Facility location using Markov chains

March 2018

CPMS Student Research Conference - Brigham Young University - Provo, Utah

Talk: Efficiency of Water Distribution in Water Poor Areas of the World Student Days - SIAM Annual Meeting - Pittsburgh, Pennsylvania July 2017

Professional Associations

Member - Society for Industrial and Applied Mathematics (SIAM)

2017 - Present

Qualifications and Skills

Programming

Tool	Level
Python	Intermediate
Matlab	Intermediate
Latex	Intermediate
Mathematica	Intermediate
C++	Beginner
HTML	Beginner
CSS	Beginner
MPI	Beginner

Educational projects include: facial recognition, signal processing with Fourier transforms, markov chains for NLP, optimization (Simplex Method, Newton's Method, etc.), data processing tools, implementation of numerical solvers for ODEs, PDEs, and various applications of machine learning algorithms

Language

English (native)

Spanish (fluent)