RAGHU RAM SATTANAPALLE

Boston, MA | Available: January - August 2024 for Co-op or Internship | (347) 873-2177
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EDUCATION

Northeastern University, Khoury College of Computer Sciences, Boston, MA — Expected December 2024
Candidate for Master of Science in Data Science — 4.00
Related Courses: Introduction to Programming for Data Science, Introduction to Data Management and Processing, Algorithms, Supervised Machine Learning and Learning Theory, Database Management Systems

New York University, Brooklyn, NY, 3.40 — May 2018
Master of Science in Mechanical Engineering,
Related Courses: Robot Perception, Simulation Tools and Software for Mechatronics and Robotics

Cardiff University, Cardiff, Wales, 3.56 — June 2016
Bachelor of Engineering in Mechanical Engineering,
Related Courses: Object-Oriented Engineering Computing, Robotics and Image Processing, Computing

TECHNICAL SKILLS

Python | R | MATLAB | SQL | Mathematica | Machine Learning (PyTorch, Scikit-learn) | Time-series Analysis | Pattern Recognition | MS Office (Word, Excel, PowerPoint) | Cloud Platforms (AWS – basic familiarity)

EMPLOYMENT HISTORY

NYU Dynamical Systems Laboratory, Brooklyn, NY — Sep 2018 – Jan 2019; June 2019 - Aug 2021; Jan 2022 - Aug 2022
Research Assistant

- Developed and crafted two grant proposals, securing $2.1 million in research funding for lab
- Designed and implemented machine learning algorithms to predict in-patient mortality rates in the ICU using vital signs and demographic data, achieving an accuracy rate of 86%
- Applied advanced data analysis and information theory to study causal relationships between gun prevalence, mass shootings, and media, published findings in Nature Human Behaviour Journal
- Developed information theory-based models of zebrafish behavior, elucidating social and hydrodynamic interactions, and published findings in Flow: Applications of Fluid Mechanics Journal
- Mentored and trained two undergraduate students, two high school students, and two high school teachers in research methodologies and advanced statistical techniques

Lost-Bytes, Brooklyn, NY — Nov 2017 - Jan 2018
Mechanical Design Engineer

- Engineered an AI-enabled Digester prototype platform using machine learning techniques that converts food waste into high-quality organic fertilizer, reclaiming up to 50% of energy from food waste
- Developed a data-driven food waste tracking software, which collects and analyzes data on nutritional components, temperature, and pH levels to optimize the energy recovery process

ACADEMIC PROJECTS

Introduction to Data Management and Processing,
Exploring the Environmental Impact: Can Staying at Home Enhance Air Quality? — May 2023 - July 2023

- Collaborated with a team of two to investigate correlation between COVID-19 lockdown measures and air quality in Massachusetts, utilizing Air Quality Index (AQI) and Social Distancing Index (SDI) as indicators
- Leveraged Python and SQL to process and analyze data from multiple sources

Introduction to Programming for Data Science,
Binomial Distribution, Modeling, and Analysis (BDMA) library — Jan 2023 - Apr 2023

- Created a Python library for binomial distribution, including modules for probability calculations, statistical analysis, and data visualization

VOLUNTEER WORK

WindAid Institute, Trujillo, Peru — Jul 2015 - Sep 2015
Volunteer / Rural Electrification Project Engineer

- Manufactured, installed, and maintained 2 wind turbines for off-grid households, providing clean and sustainable electricity access to individuals in rural communities