CODY J GILBERT

New York, NY
cody@codyjoe.com |Github: *github.com/cody-joe-gilbert* | Website: *codyjoe.com*
For more information, see my website: *codyjoe.com/resume*

EDUCATION

New York University, Courant Institute (NYU) | New York, NY — May 2018 to May 2020
Master of Science in Computer Science — GPA: 3.8/4.0
Courses: Algorithms, Programming Languages, Operating Systems, Statistical Learning, Probability Theory, Database Systems, Artificial Intelligence, Big Data Application Development, Big Data Analytics
Fall 2019: Statistical Natural Language Processing, Predictive Analytics

North Carolina State University | Raleigh, NC — Aug 2011 to May 2015
Bachelor of Science in Nuclear Engineering — GPA: 4.0/4.0
Honors: Valedictorian, Dean's List, University Scholars, Eagle Scout

SKILLS

Programming: Python (Pandas and Numpy), C/C++, R, SQL, MATLAB, Linux, Hadoop, Spark, Scala, Scheme, Fortran, Microsoft Office, LaTeX

EXPERIENCE

Research Assistant to Dr. Benjamin Peherstorfer — Jan 2019 to July 2019
New York University – New York NY

- Researched PDE-based model reduction methods such as Proper Orthogonal Decomposition ("POD"), Discrete Empirical Interpolation Method ("DEIM"), and Adaptive-DEIM implemented using MATLAB

Recitation Leader for Fluid Dynamics — Jan 2019 to May 2019
New York University – New York NY

- Led a weekly recitation by presenting material to 15-20 undergraduate students
- Held weekly office hours to provide more individualized support and graded homework

Nuclear Design Engineer (Nuclear Engineer II) — June 2015 to Jan 2018
Duke Energy Corporation – Charlotte NC

- Implemented machine learning algorithms to estimate reactor coolant system flow rates
- Developed machine learning algorithms to improve accuracy of engineering calculations
- Derived the solutions to neutronic diffusion equations using a Fortran-based interface
- Developed nuclear fuel reload design using Python and a Fortran-based interface
- Implemented all data-driven and machine learning solutions using Python and Fortran

PROJECTS

FuzzyPanda — **Site:** *codyjoe.com/projects/fuzzypanda*
Python-based tool for fuzzy joining Pandas DataFrames using approximate string matching.

Python Tutorials — **Site:** *codyjoe.com/projects/#tutorials*
Published series of introductory and intermediate Python lessons.

HMDA Data Exploration with Spark — **Site:** *codyjoe.com/projects/#hmda*
Project sought to find patterns of discriminatory lending using data big data with Apache Spark.

Finding Napa — **Site:** *codyjoe.com/projects/#napa*
Predicted US regions best matching vineyard conditions of Napa Valley using Hadoop and climate change data.