# **CODY J GILBERT**

New York, NY

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#### **EDUCATION**

New York University, Courant Institute (NYU) | New York, NY

May 2018 to Present

Master of Science in Computer Science

GPA: 3.7/4.0

**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, Quantum Computation

## 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 Present

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
- Optimized, maintained, documented and integrated code from various contributors

# **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