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**EDUCATION**

**University of Illinois at Urbana-Champaign (UIUC)** Champaign, IL

M.Sc. in Computer Science, Specialization in Data Science Expected May 2022

B.Sc. in Econometrics and Statistics, Minor in Computer ScienceExpected May 2021

* Dean’s List, Spring 2020 (3.95/4.00) Major GPA: 3.60/4.00
* Certificate in Data Science
* **Select Coursework**  **–**  Discrete Structures, Data Structures, Statistical Learning, Applied Machine Learning,

Data Analysis (Regression, Multivariate, Bayesian), Data Visualization, Time Series

**RESEARCH EXPERIENCE**

**AbbVie,** Mar. 2020 – Present

*Cheminformatics Research Engineer Champaign, IL*

* Built web application for *in silico* drug discovery with { Keras and React, deployed using AWS server }
* Researched and implemented deep generative modeling techniques for molecular design { RL, VAE-GAN }
* Developed a novel application of { NMT-GAN } for deep learning prediction of optimal reaction conditions
* R. Gupta, D. Zhang, A. Jayaraman. *Optimizing de novo molecular design for proprietary chemical space*. (draft)

**UIUC Department of Economics,** Jan. 2019 – Present

*Econometric Policy Researcher Champaign, IL*

* Investigated the link between personality and opioid use with ML { TensorFlow, caret, glmnet }
* Developed and validated predictive risk models with open source data, achieving 96% acc. { UCI, Kaggle, CDC }
* Assessed predictive models within a decision framework to implicate effective health care policy strategies

**Northwestern Medicine,** May 2017 – Aug. 2017

*Research Intern Chicago, IL*

* Investigated whether the size of the { *C9orf72* expansion mutation } correlates with ALS disease severity
* Formulated a procedure that overcame the difficulties of sequencing the highly repetitive, GC-rich expansion

**LEADERSHIP EXPERIENCE**

**UIUC Department of Economics,** Aug. 2019 - Present

*Head Teaching Assistant Champaign, IL*

* Augmented course curriculum to emphasize student understanding of industry standards for data analysis
* Developed a protocol to guide a **<** team **>** of 7 TAs, ensuring consistency and robustness in provided feedback
* Held weekly office hours for 15+ students on ML algorithms and statistical methods for model validation
* Conducted bi-weekly reviews of 90 student papers, providing guidance on research methodology and analysis

**UIUC Department of Economics,** Aug. 2019 - Present

*Econometrics Tutor Champaign, IL*

* Selected as 1 of 8 tutors on the basis of professor recommendation and departmental academic achievement
* Served as a specialized tutor for advanced coursework in applied econometrics (ML, Forecasting, Policy Eval.)

**SKILLS AND INTERESTS**

* **Languages** Proficient in R • Java ­­**–** Intermediate in Python • JavaScript • HTML • CSS
* **Libraries** Keras/TensorFlow • D3 • Bootstrap • React • Tidyverse • SciPy/NumPy
* **Tools** Git • Tableau • Excel • Stata • R Markdown • Jupyter • LaTeX
* **Interests** Human Development • Precision Medicine • Typesetting • Food culture • Storytelling