

Fauna Mahootian

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WORK EXPERIENCE

Natural Language Processing Research Assistant

September 2018 - December 2018

Cornell University Dept. of Information Science, advised by Dr. Xanda Schofield, Dr. David Mimno, Dr. Alicia Eads

- Created a corpus search method for sociologists that improves on recall of traditional methods. Used LDA topic modeling, a widely used method of identifying topics of a collection of texts
- Wrote Python code implementing Bayesian optimization to improve filtration method, conducted lit review
- Co-author on publication submission and accepted conference paper (IC2S2)

Program Evaluation Consultant, Freelance

January 2019

Crescendo, Montreal, QC

- Created method for evaluating educational Slackbot program to make workplace a safer and more supportive environment
- Rapidly learned about program evaluation through lit review and implemented findings in survey design and metric
- Prepared literature review, survey instrument, collection of leads, and other resources for team to use moving forward

Biochemistry Research Assistant

October 2015 - April 2016

Hunter Lab, University of Michigan, advised by Amanda Meier, Ann Arbor, MI

- Investigated the effect of colonization by arbuscular mycorrhizal fungi (AMF) on plant defenses in four species of milkweed
 - Carried out statistical analysis in R, presented results at annual undergrad research symposium
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PROJECTS

[Python package for NLP-aided search](#)

June 2019 - August 2019

Cornell University Dept. of Information Science, advised by Dr. Xanda Schofield, Dr. David Mimno

- Created Python package to enable sociologists to improve corpus search results
- Implemented research group's methodology (ensemble of keyword search, relevant topic percentages, etc) to improve search result quality. Integrated Mallet via Gensim wrapper. Constructed data pipeline. Git for version control, code reviews

[Removing Gender Bias from Hiring Algorithms](#)

March 2019

TechTogether Boston Hackathon 2019, Boston, MA

- Created method to reduce impact of gender bias in hiring algorithms using XGBoost, with team of 4 in 48 hours
- My role: data cleaning and transformation, data visualization, debugging, presentation materials

[Console-based snake game, etc.](#)

January 2019 - May 2019

Functional programming, Cornell University, Ithaca, NY

- Worked in groups and solo on software engineering projects in a functional language (OCaml)
 - Led a team of 4 in implementing console-based snake game in 1 week. Delegated workload and organized meetings effectively. Planned timeline and extra features. Stepped up when extra work was necessary
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TECHNICAL SKILLS

Proficient: Python, OCaml, Unix/Bash, Git, Jupyter, MALLET, NLTK, Pandas, NumPy, Scikit-learn, Scikit-Optimize

Familiar: JavaScript, Java, R, D3, Gensim

RELEVANT COURSES

Object-Oriented Programming • Functional Programming • Discrete Structures • Linear Algebra • Data Science • Data Visualization • Independent Study on LDA Topic Modeling • Crowdsourcing and Human Computation • Computational Psychology

EDUCATION

Cornell University, College of Agriculture and Life Sciences, Ithaca, NY

May 2019

Bachelor of Science, Human Behavior and Information Science - *Interdisciplinary Studies Program*

GPA: 3.64

EXTRACURRICULARS: Effective Altruism Global: London 2019 Logistics volunteer • MIT HealthHack NYC 2018 • Waste Not Design Collective • Kitsch Magazine • Sustainability and Humanitarian Outreach Chair of co-op residence • Cornell Environmental Collaborative (ECO)