# Lori Fomenko

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# **EDUCATION**

University of Connecticut	Storrs, CT
Ph.D. Candidate in Environmental Engineering, GPA: 4.0/4.0	2016 - 2020
Masters of Science in Environmental Engineering, GPA: 4.0/4.0	2016 - 2018
Bachelor of Science and Engineering in Civil Engineering, GPA: 3.1/4.0	2011 – 2016

# SKILLS

Proficient in: Python, R, SQL, QGIS, Bash scripting, JavaScript, Tableau, Spotfire, Excel Familiar with: AWS, Hadoop, Java, Spark, Power BI, Airflow

# **EXPERIENCE**

#### McKinsey & Company

Data Scientist

- Utilizing climate domain expertise, engineering background and data science skills to conduct analyses and build predictive models and pipelines in various client contexts in the food, energy, water, climate and agriculture spaces.
- Developed models for forecasting yield and in-season prices of an agricultural commodity in Asia with ~95% accuracy to advise client on when, where and how much to buy throughout the season
- Created and utilized new approach for identifying highly suitable crops in different regions of the world based on climate conditions and plant physiology for long-term sustainable agriculture planning
- Developed script to automatically read in USDA crop progress reports for various agricultural commodities across US to compare to historical baselines on weekly basis and created corresponding dashboard with additional weather variables to visualize progress based on current crop growth stage to help inform marketing and sales decision making

# University of Connecticut/U.S. Department of Education

Research Scientist

- Conducted research on global megacities, quantifying the influence of land surface changes and irrigation on temperature and precipitation patterns (Matlab, NCL, Python, R)
- Development and performance evaluation of a <u>new ensemble averaging approach</u> aimed at reducing the time and computational resources required in regional climate model simulations (NCL, R)
- Co-authored <u>study</u> analyzing recent drought extent and severity in tropical South America (NCL, R)
- Helped teach three courses as an undergraduate and was a guest lecturer for Engineering Hydrology

# Town of Mansfield,

Engineering Intern/GIS Specialist and Trainer

• Managed various engineering programs and projects in: transportation policy, street design, construction, surveying, flood risk modeling, project cost estimation, creation and management of town's geospatial data lake and relational database systems, design of platform for collecting and updating geospatial data in real-time, acting as GIS specialist training town employees in use of GIS

# **PROJECTS**

**EcoUrbs,** Founder/CEO, <u>agtech startup</u> specializing in smart indoor farming units (AutoCAD, Adobe XD) **TEDxUConn,** Invited Speaker, gave TEDx talk titled "<u>*The Changing Face of Media: How Science is Left Behind*</u>" **ClimaMedia,** Co-Founder, <u>climate change educational media organization</u> (CSS, HTML, JS, Adobe CC) **Climate Modeling,** Earth Systems Modeling <u>course project</u> on precipitation modeling in the Northeast US **EERI,** Seismic Design Competition, computer modeling/testing of model and technical presentation (SAP, Matlab) **Engineers Without Borders,** Senior Design Team, <u>Water and Health Project</u> in Woreta, Ethiopia (AutoCAD, GIS)



Storrs, CT *Feb. 2016 – Dec. 2018* 

Mansfield. CT

Jun. 2015 – Aug. 2017

Denver, CO Feb. 2019 – Present