Benjamin Fattori

Toronto, ON
Canada
ben.fattori@mail.utoronto.ca
647-968-2884

EMPLOYMENT

Data Science Research Assistant   September, 2020 - Present
RiskLab, University of Toronto
· Worked with a team of data scientists to develop a novel machine learning model for portfolio optimization
· Designed feature creation pipeline in Python and SQL to automate the testing and implementation of new features
· Leveraged EDA insights to develop new features and improve preprocessing resulting in an improvement over the random forest benchmark by 32% (MAE decrease)

Art of Problem Solving - Grader   April, 2019 - Present
Toronto, ON
· Provided clear and detailed feedback to student submissions
· Courses graded include number theory, combinatorics, algebra, and calculus

Undergraduate Research Assistant   February, 2019 - June, 2019
Department of Mathematics, University of Toronto
· Helped design a mathematical model of oscillatory behaviour in the reward pathway of the mammalian brain
· Wrote extensive codebase in MATLAB to implement, analyze and make predictions about the model
· Applied techniques learned in differential equations and math modelling courses
· Research is ongoing with goal of publishing results in 2020

EDUCATION

Honours Bachelor of Science   2015 - 2020
University of Toronto
Mathematics Specialist, Physics Major
Graduated with Distinction

PROGRAMMING LANGUAGES

· **Python**: Experienced; Used alongside Scikit-learn, pandas, and NumPy, in data science research, computational physics courses and computer science courses
· **SQL**: Experienced; Wrote queries and created tables for analysis and modelling in Python
· **MATLAB**: Experienced; Used in applied math research for simulations, implementing mathematical models and solving differential equations
· **PyTorch**: Experienced
· **Git**: Experienced; Collaborated with other data scientists via GitLab
· **C#**: Junior Developer; basic experience with Microsoft Azure