MATEA GJIKA

(617)-256-1041 | mateag70@mit.edu

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, SLOAN SCHOOL OF MANAGEMENT

Cambridge, MA

Candidate for Master of Business Analytics, Operations Research Center, August 2024

2023 - Present

- Coursework: Machine Learning Under a Modern Optimization Lens, Optimization Methods, Analytics Lab, Analytics Edge
- Optimization Project: Mixed-integer model for employee retention and financial health strategy during a merger
- Machine Learning Project: Holistic Framework optimal classification trees with hyperplanes for improved interpretability
- Analytics Edge Project: Skill gap identification and salary prediction based on 2022 Glassdoor job postings

ÉCOLE POLYTECHNIQUE

Palaiseau, France

B.S. in Mathematics and Computer Science, cum laude (3.8/4.0)

2020 - 2023

- Coursework: Analysis, Algebra, Statistics, Probability, Computer Architecture, Cryptography, Image Analysis, Algorithms
- Awarded outstanding student distinction for community involvement
- Thesis: Predicting accuracy of artificial neural networks (A+)

TECHNICAL SKILLS

• Python (PyTorch, Sci-kit learn, Tensorflow, Matlab), SQL, R, Julia (Gurobi, Interpretable AI), C++, Git, Angular

EXPERIENCE

MIT OPERATIONS RESEARCH CENTER

Cambridge, MA

Research Assistant to Professor Georgia Perakis (Python)

2023 - Present

- Applying prescriptive machine learning techniques (causal forests, random forests and CART) to patient demographic, genomic and image data to assist individualized ovarian cancer treatment, in collaboration with Koch Institute
- Developed a theoretical error bound for hierarchical time-series forecasting using decision trees

MIT SLOAN/AKKODIS Cambridge, MA

Subsidiary of Adecco Group, technology and digital engineering consultancy

Analytics Lab Team Member (Python, Gurobi)

Fall 2023

- Awarded 1st place out of 22 at the MIT Initiative for Digital Economy Analytics Lab 2023
- Developed multi-objective network flow model to optimize location of multi-modal mobility hubs in Leuven
- Utilized model results to devise transportation shift strategy, with expected 12% reduction in CO2 emissions

ÉCOLE POLYTECHNIQUE - LABORATOIRE D'INFORMATIQUE

Palaiseau, France

Research Assistant to Professor Leo Liberti (Python)

Winter 2023

Investigated impact of alignment of training and testing node values on neural network prediction accuracy

EASYPAY Tirana, Albania

Digital payment platform and e-wallet solution, official Albanian partner of Ria Money Transfer

Machine Learning and Data Analysis Consultant (Python)

2022 - 2023

- Designed a credit scoring model leveraging recency, frequency, and monetary analysis coupled with k-Means clustering to assign overdraft privileges
- Developed algorithm to link utility payments to individual customers, enabling comprehensive behavioral analysis of over 1 million transactions performed by 60,000 users over 13 years

FACILIZATION Tirana, Albania

Leading banking software solutions provider

Junior Software Developer (Jenkins, Talend OS, SQL)

2022 - 2023

- Implemented data migration, transformation, and validation Talend flows, leading to a 12% reduction in data errors
- Automated code building and testing using Jenkins, saving 10 hours of developer time per week

LUFTHANSA INDUSTRY SOLUTIONS

Tirana, Albania

Software Development Intern (Angular)

Summer 2021

• Developed reactive ticket-management system for smoother task management, assignment, and tracking

ADDITIONAL INFORMATION

Languages: Albanian (Native), French (Fluent), Italian (Beginner), Spanish (Beginner)

Interests: Piano (Tsakalov Music Conservatory Graduate), Cooking, Public Speaking, Travelling