LOUIS RAISON

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EDUCATION

MIT SLOAN SCHOOL OF MANAGEMENT

Cambridge, MA

Candidate for Master of Business Analytics, Operations Research Center, August 2020

2019 - Present

- Relevant Coursework: Machine Learning, Optimization Methods, Supply Chain
- Projects: Predicting the demand and optimizing the allocation of taxis in different districts of NYC to reduce the total distance traveled and the number of taxis; Predicting the wins in League of Legends online game to determine odds

ÉCOLE POLYTECHNIQUE (L'X)

Palaiseau, France

Master of Science in Engineering, Bachelor of Science in Engineering

2016 - 2019

- Applied Mathematics and Computer Science major, specialized in High Performance Computing
- Relevant coursework: Parallel/Distributed Computing, Computer Architecture, Operations Research, Machine Learning
- Invented a secure, direct exchange protocol for trading digital goods, 2nd place at the Blockchain Innovation Challenge in Columbia University
- Optimized the settings for supercomputers at French Atomic Energy Commission using genetic algorithms

LYCÉE SAINTE-GENEVIÈVE

Versailles, France

2014 - 2016

Mathematics, Physics, and Computer Science

• Preparation study for selective entrance exams to Grandes Écoles

EXPERIENCE

MIT SLOAN SCHOOL OF MANAGEMENT

Cambridge, MA

Research Assistant for Professor Dimitris Bertsimas

September 2019 - Present

- Developing routing systems for public transportation in Boston from records of GPS positions of buses
- Programming optimization and graph algorithms to calculate the average speeds at different times of day
- Leveraging parallel computing on MIT clusters to process shortest path calculations for 3GB of GPS data

MIT SLOAN SCHOOL OF MANAGEMENT/ LINEAGE LOGISTICS

Cambridge, MA

Analytics Lab Project Team Member

September 2019 - Present

- Predicting customer orders on a location-to-warehouse lane to consolidate them and lower costs
- Utilizing various methods of Machine Learning and balancing the dataset to improve predictive performance

NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY (AIST) Tsukuba, Japan Visiting Researcher April 2019 - August 2019

- Created a music composition tool using advanced Deep Learning techniques (including long short-term memory Recurrent Neural Networks) to improve interactive composition
- Conducted studies to find essential features to user experience in assisted music composition; publication process ongoing
- Coded with Pytorch and advanced data visualization, coupled with a user-interface in MuseScore3

SOCIÉTÉ GÉNÉRALE CORPORATE & INVESTMENT BANKING

Paris, France

Software Developer

June 2018 - August 2018

- Built an open-source Python/JavaScript interface for data visualization to improve workflow and avoid misuse of Excel
- Introduced new standards for developing environments such as Visual Studio Code and Jupyter

CIVIL AVIATION UNIVERSITY OF CHINA

Tianjin, China

Assistant Math Teacher

October 2016 - April 2017

- Taught 80 students mathematics including Algebra, Analysis and Probabilities
- Led student groups using singing to help Chinese students learn French

ADDITIONAL INFORMATION

- Technical Skills: Python, Julia, R, SQL, Java, Ocaml, LaTex, C, Web Dev (HTML, CSS, JavaScript, php), Git, ML packages (Pytorch, Scikit-Learn), software (Illustrator, Photoshop)
- Languages: French (Native), Chinese (Basic), Japanese (Basic)
- Volunteer teacher: Taught Mathematics to middle school students (September 2014 January 2016)
- Interests: Proficient cook in East-Asian cuisines, a cappella group singer, open-source developer for the Jupyter project