

SETH CHATTERTON

Cambridge, MA

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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, SLOAN SCHOOL OF MANAGEMENT Cambridge, MA
Candidate for Master of Business Analytics, Operations Research Center, August 2024, GPA: 5.0/5.0 2023 – Present

- Coursework: Optimization, ML under Optimization, Modeling with ML, Physical System Modeling with ML, Econometrics
- Capstone Project: Simulation modeling of the economic impact of the adoption of AI systems. Partnered with Accenture.
- Optimization Project: Last-mile delivery route planning for electric vehicles (Julia, Gurobi)
- Analytics Lab Project: Built an interpretable predictive model for hiring financial professionals at MassMutual (Python)
- Awards: Recipient of MIT Sloan Dean's Fellowship, a merit-based scholarship
- Activities: AI & ML Club, MIT AI Alignment, Global Security Tech Club, Quantitative Investment Management Club

DARTMOUTH COLLEGE Hanover, NH
Bachelor of Engineering, Concentration in Computer Engineering, GPA: 3.8/4.0 2017 – 2020

Participated in the 3-2 collaborative program between Dartmouth and Bowdoin, earning two Bachelor's Degrees over 5 years

- Coursework: Deep Learning, Fourier Transforms, Digital Electronics, Control Theory, Mechatronics, Systems
- Capstone Project: Legislative prediction tool to determine the probability of bills passing in state and national legislatures
- Activities: Division 1 Varsity Rowing, Woodsmen's Team - competitive lumberjacking

BOWDOIN COLLEGE Brunswick, ME
Bachelor of Arts in Physics and Computer Science and Mathematics, cum laude, GPA: 3.9/4.0 2015 – 2019

- Coursework: Algorithms, Statistics, Statistical Physics, Artificial Intelligence, Databases, Networks, Linear Algebra
- Awards: Sarah and James Bowdoin Scholar, Bill Brown Distinguished Rower Award for team leadership

TECHNICAL SKILLS

- Python (pandas, NumPy, PyTorch, OpenCV, scikit-learn, Matplotlib), SQL, R, Julia, Java, C/C++, MATLAB, Excel

EXPERIENCE

MIT OPERATIONS RESEARCH CENTER Cambridge, MA
Research Assistant to Professor Dimitris Bertsimas 2023 – Present

- Designed and tested a novel technique for building more interpretable language models utilizing soft decision trees (PyTorch)
- Built a LLM system using GPT-4 for health insurance document understanding and financial information extraction in collaboration with a small Fintech company (Python, OpenAI)
- Implemented a LLM negotiation system for advice in contract changes while preserving the confidentiality of information

SAGE ANALYSIS GROUP Boston, MA
Consultant (promoted from Consultant Analyst 2023, promoted from Analyst in 2021) 2020 – 2023

- Prototyped event detection system for Next Generation 911 emergency video calls for first responders in Pytorch & OpenCV
- Created an aircraft sustainment simulation in R for client with large fleet of aircraft to model future completion of maintenance and upgrades, identifying multiple unforeseen bottlenecks
- Increased headcount 25% by leading Sage's recruiting efforts through interviews, career fairs and onboarding new hires
- Developed computer vision algorithm for detecting and flagging abandoned objects in high-traffic areas with OpenCV
- Analyzed messy equipment inventory datasets with pandas and scikit-learn, and presented exploratory findings in Tableau

CONSIDDR, INC Boston, MA
Software Engineering Intern, Search Engine Start-Up Summer 2019

- Developed core piece of Considrr's product, the Evidence Matcher, which identifies equivalent paraphrased information among returned search queries, increasing the quality of results the user sees
- Created a predictive ML model and executed every stage from training to deployment (Tensorflow, Spacy, GCP, Neo4j)

ADDITIONAL INFORMATION

- 3rd place, OpenAI Hackathon for Climate Change (2022); 3rd place, MIT Grand Hack (2020)
- Grua/O'Connell mini-grant award to present independent study research in Ireland (2018)
- U.S. Patent No. 10,118,670, a novel system for measuring tension in sailboat rigging (2016)
- Volunteer Elementary School Math Assistant (2015-2018)
- Interests: rowing, running, 3D printing, sci-fi, sailing