DANIEL STEWART

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EDUCATION

Massachusetts Institute of Technology   Cambridge, MA | Graduation: May 2023
– Bachelors of Science in Mathematics, and in Computer Science Engineering, GPA: 4.9/5.0
– Relevant Courses: Quantitative Methods in Natural Language Processing, Discrete Probability and Stochastic Processes, Stochastic Processes, Theory of Computation, Probabilistic Method in Combinatorics

Iowa City West High School   Iowa City, IA | Graduation: June 2019
– Relevant Courses: Data Structures, Multivariable Calculus

EXPERIENCE

Amazon Software Developer Intern   Cambridge, MA; Seattle, WA | June 2022, 2023 – September 2022, 2023
– Developed a machine learning model to predict defective customer interactions
– Coded in Python and used UNIX commands to train the model and analyze experiment results
– Coded in Java to work towards deployment of the model for customer use

Algorithms Teaching Assistant   Cambridge, MA | February 2023 – May 2023
– Led recitation section solving example problems and answering student questions for the Design and Analysis of Algorithms (6.1220) class at MIT
– Graded exams and put together class notes based on lecture content
– Test solved and contributed to making quizzes for the class

Machine Learning Research Assistant   Cambridge, MA | February 2023 – May 2023
– Worked on creating additional applications for datamodels
– Ran experiments to verify the validity of the approach
– Read papers on state of the art machine learning privacy methods

Political Science Research Assistant   Cambridge, MA | June 2021 – September 2021
– Formatted large data sets from 2020 elections, and others, using the pandas module in Python
– Used Python packages such as BISG and segregation to calculate relevant statistics
– Proposed and explored a research question relating to implementation of elections

Linear Algebra Grader   Cambridge, MA | Sept 2020 – December 2020
– Graded proofs from roughly 30 undergraduate students for the upper level linear algebra (18.700) class at MIT

UROP Algebraic Number Theory Research   Cambridge, MA | June 2020 – August 2020
– Learned a large volume of number theory, including the proof of Finiteness of the Class Group, Discrete Valuation Rings, and others
– Worked on strengthening a bound on the asymptotic number of isogeny classes of elliptic curves over a finite field p

LEADERSHIP AND ACTIVITIES

Math Club Team Captain   Iowa City, IA | Aug 2016 – Jun 2019
– Gave instructional lectures to math club and collected problems making weekly problem sheets
– Organized lessons for the second year of the Iowa City Math Circle, on various competition math topics

USA/Canada Mathcamp   Mines, CO | Jun 2018 – July 2018
– Chosen to attend intense, selective math camp which taught classes on a broad range of difficulties, including typically graduate topics, such as Lebesgue Integration, Class Numbers, and Galois Theory

Emerson & Music   Iowa City, IA; Cambridge | May 2019 – Current
– Earned Emerson Scholarship at MIT for $1,000 to play piano and take lessons
– Participated in Iowa competitions, earning first prize in some, performed for school fundraisers which raised over $2,000 dollars for the local Music Auxiliary

AWARDS AND HONORS

– USA Math Talent Search 2 Time Bronze Winner (2016-2017), Top 10 State Math Competition Placement (2019), State IMTA Piano Competition Winner (2018), AMC Honor Roll (2019)

SKILLS, INTERESTS, INVOLVEMENT

– Programming: Python (pandas, pytorch, sklearn), Java, TypeScript, SQL