DANIEL RITTER

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School Address: 257 Thayer St., Providence RI, 09062

Permanent Address: 701 E. Bethel School Rd. Coppell, Texas 75019.

EDUCATION

May, 2021 BA in Computer Science, BA in Political Science, Brown University

June, 2022 (anticipated) MSc in Advanced Computer Science, Oxford University

WORK EXPERIENCE

Brown University | Providence, RI | June 2020 – Present

Teaching Assistant for CS1470(Deep Learning) September 2019 – December2019

- Assisted in developing and grading course material slides and assignments
- Held weekly TA hours and labs to help students better understand the course material

Head Teaching Assistant for CS0030(Computation for the Social Sciences and Humanities) September 2019 – December2019

- Managed undergraduate TA staff for the course
- Allocated office hours and student resources
- Held weekly office hours to help students with course material
- Created and graded course assignments and projects

Teaching Assistant for CS1420(Machine Learning) January 2021 – Present

- Held weekly office hours to help students with course material
- Created and graded course assignments and projects

Kern Systems | Boston, MA | June 2020 – August 2020

Machine Learning Fellow June 2020 – August 2020

- Worked to create machine learning based compression systems for use in a DNA storage pipeline.
- Assisted in research on applying machine learning and AI methods to biodesign problems like protein search and functional fitness landscape estimation.

Perspectum Diagnostics | San Francisco, CA / Oxford, UK | June 2019 – August 2019

Image Analysis Intern June 2019 – August 2019

- Worked to develop and implement algorithms for automated processing of digitized pathology slides using deep/machine learning methods.
- Improved automated nuclei detection in biopsy slides significantly by replacing the original semantic segmentation algorithm(U-Net) with a more complex instance segmentation architecture(Mask-RCNN), solving a common failure case involving classification of overlapping nuclei.

RESEARCH EXPERIENCE

Brown University | September 2018 – Present

Honors Thesis September, 2020-2021

- Wrote a senior thesis focused on multiagent reinforcement learning and bounded computation in game-theoretic reasoning

Starcraft II ExAI Project September, 2018- May 2019

- Worked as part of the DARPA ExAI project to design a reinforcement learning agent capable of playing the RTS game Starcraft II

SKILLS, INTERESTS AND OTHER ACHIEVEMENTS

- Fluent in Java, C, Python
- Comfortable with Javascript, HTML, CSS, Pytorch, Tensorflow, Keras, ROS, UNIX systems
- Jazz and classical piano