William Lee

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EDUCATION

Swarthmore College (Computer Science) *2020 expected (3.8+)*

WORK EXPERIENCE

Behavior Prediction, Waymo *Summer 2019*

— Machine learning for self-driving cars at Waymo (formerly Google's self-driving car project).

Search Relevance, Salesforce *Summer 2018*

— Redesigned the search metrics pipeline for Salesforce Search Cloud using Splunk and Hadoop.
— Data analysis on terabyte-scale logs to accurately measure Salesforce Search's performance.

Laboratory for Advanced Sensing, NASA Ames *Summers 2016 and Summer 2017*

— Designed and implemented a computer vision alignment pipeline to fully georectify 4k UAV footage onto satellite imagery.
— Implemented a sliding window CNN using Keras to classify coral reef morphology.
— Developed a entropy-based adaptive gaussian blur module for NASA's stereogammetry suite.

ACADEMIC EXPERIENCE

St. Anne's College, University of Oxford Visiting student at the University of Oxford for the 2018–2019 academic year in the mathematics and computer science departments. Includes graduate level coursework in Advanced Machine Learning and Randomized Algorithms.

Research Assistant, Biomedical Machine Learning Lab Research assistant working with Professor Ameet Soni on weakly supervised learning for Chest Xrays.

PROJECTS

Capturing Population Events Using HMMs
Analyzed genomic sequence data from different human populations in the 1000 Genomes Project. Combined multiple projects from a semester-long Bioinformatics class to create an end-to-end genomic pipeline to convert raw sequence data to population-size estimates using TMRCA. Successfully captured the out-of-Africa bottleneck; concluded that smaller-scale population events require more data.

Weight Uncertainty in Neural Networks
Replicated and extended the results found in *Weight Uncertainty in Neural Networks (Blundell et al., 2015).*

COURSEWORK

University of Oxford	Advanced Machine Learning, Probability & Computing, Probability, Artificial Intelligence
Swarthmore College	Machine Learning, Computer Vision, Bioinformatics

SKILLS

Python, PyTorch, C++, Java, OpenCV, Sklearn, Hadoop/Splunk