Alexander Feldman

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EDUCATION

Brandeis University | Waltham, MA
BS in Computer Science
Expected December 2018
Minors in Gender Studies & Economics
Semester at Queen Mary Univ. of London
GPA: 3.57

TECHNICAL COURSEWORK

Artificial Intelligence
Compilers
Computer Supported Collaboration
Data Structures and Algorithms
Discrete Structures
Image Processing
Linear Algebra
Operating Systems
Probability
Programming Language Theory
Statistics for Economic Analysis
Structure & Interpretation of Comp. Progs.
Theory of Computation

PROGRAMMING EXPERIENCE

LANGUAGES

Python | Java | MATLAB | C++

LIBRARIES

OpenCV | NumPy | TensorFlow | Stat. and Machine Learning Toolbox | Computer Vision Toolbox

EXPERIENCE

Software Engineering Intern | Jun. 2018 – Aug. 2018
Uber ATG, AVMaps Automation | Pittsburgh, PA
AVMaps Automation designs and integrates models to automate map creation.
• Efficiently implemented a new feature in our automated traffic light mapping pipeline by reformulating as matrix multiplication.
• First on the team to use Docker containers to integrate an outside model into an existing pipeline architecture so I led team-wide transition.
• Throughout the internship, I tested proposed designs and documented results in metrics-heavy summaries.

Chairperson | Nov. 2015 – Dec. 2018
Student Union Allocations Board | Brandeis University
The Allocations Board decides on all funding for student clubs.
• For three semesters, I headed an eleven-member team with full control of a $1.7M budget.
• Following previous leadership's mismanagement of funds, I restructured governance and policies.
• I was awarded the Kappa Eta Sigma service award for the turnaround.

Computer Vision Researcher | May – Jul. 2017
College of Computing and Informatics | University of North Carolina, Charlotte
Participant in the NSF Research Experiences for Undergraduates program.
• In the Video and Image Analysis Lab, I researched fingerprint interoperability.
• Using local texture descriptors, we improved on the state of the art.
• My slideshow and poster detailing the research was awarded second place at the REU-wide symposium.

Teaching Assistant | Jan. – May 2017
Brandeis University Department of Computer Science | Waltham, MA
Undergraduate teaching assistant for Data Structures and Algorithms.

PERSONAL PROJECTS

Exam Coversheet Reader | Jul. 2017
Manually entering grades into a database is time consuming for faculty who teach a large number of students. Extracting information from a scan of papers prior to returning them to students is a more efficient process. This project, implemented in Python with OpenCV, does just that.

Ball Tracking for Squash | Jul. 2016
Squash is a fast-paced racquet sport played indoors. I wrote a computer vision program in MATLAB which follows the action in a rally. It detects, tracks, and draws the ball in 2D while handling occlusion from players and racquets.

AWARDS

Outstanding Poster - Second Prize | Jul. 2017
UNC Charlotte, Computer Science REU
My research on fingerprint interoperability won second place at the poster symposium.

Kappa Eta Sigma Service Award | May 2017
Brandeis University, Office of the Dean of Students
This prize is awarded to a sophomore who by thoughtfulness and kindness has contributed to the well-being of his fellow students.