Jared L. Katzman

Education

Yale University - New Haven, CT
Bachelor of Science, *Cum Laude* | Computer Science with Honors | May 2016

Work Experience

Amazon Web Services, *New York City, NY*   AI Labs | Software Engineer II | Jan 2018 – Current
- Developed Entity Linking models on top of BERT which improved precision by 10% compared to baseline methods.
- Researched, developed, and released IP Insights, a deep learning algorithm that learns the history of users' IP addresses to identify anomalous behavior such as fraudulent logins and account takeovers.
- Discovered and removed bottlenecks in algorithm's performance by tuning MXNet's distributed training, leading to a 50% reduction in training time for 75% of the comparable cost of scaling.
- Presented a talk on scalable, distributed machine learning on MXNet at Amazon's internal developer conference to 110 attendees. Designed and facilitated workshops on machine learning and security.

Out in Tech, *New York City, NY*   Out in Tech U | Digital Mentorship Lead, Volunteer | March 2018 – Current
- Started Out in Tech U's digital mentorship program, where LGBTQ+ students work on projects with professional mentors over the course of 8 week semesters.
- Managed 3 coordinators to design and facilitate all digital programming for 50 participants across the United States.
- Participated in the Spring 2018 cohort as a mentor; Worked with a mentee, with no previous experience in data analysis, on how to use Python, Jupyter Notebooks, Pandas, NumPy, and Plotly to visualize the impact of America's Opioid Crises.

Bridgewater Associates, *Westport, CT*   Security Technology | Technology Associate | Sept 2016 – Nov 2017
- Built a real-time analytics platform with AWS services to transform security controls and operations from a perimeter, defensive model to a data-centric, automated-reasoning framework.
- Redesigned a batch processing architecture as a real-time, serverless, streaming framework which decreased a security control's effect time from 24 hours to sub minutes and reduced monthly costs by a factor of 10.
- Received the highest performance grade amongst the 2016 Technology Associate cohort.

Research & Publications

DeepSurv: Personalized Treatment Recommender System Using A Cox Proportional Hazards Deep Neural Network
- Researched the application of deep neural networks to survival analysis and demonstrated a deep neural network's ability to predict the risk of an event occurring (i.e. death of a patient).
- Demonstrated state-of-the-art performance in predicting a patient's risk of death and providing them with a personalized treatment recommendation.
- Released an open-source Python package with a Docker framework to increase the reproducibility of experiments.
- Presented at the *International Conference of Machine Learning* Computational Biology Workshop 2016. Published in the journal *BMC Medical Research Methodology.*

White House LGBTQ Tech & Innovation Summit Project: #transneeds
- Ran a social-media listening campaign to gather data on trans health issues.
- Analyzed over 12,000 responses and presented findings as policy recommendations to the U.S. Federal Government.

Competitions

US Air Force's CyberPatriot
Secured and defended simulated networks from hackers and real-time security threats. Worked with various vulnerability analysis and prevention tools.

Leadership Development

White House LGBTQ Tech & Innovation Summit, Summer 2015 – Conference on technology and open data in recruiting diversity, criminal justice, and civic engagement.
Shalom Hartman Institute's iEngage, Winter 2014 – Program on negotiation and conflict resolution at Israeli think-tank.
American Legion's NJ Boy State, Summer 2011 – Weeklong leadership program simulating NJ's state government.

Skills & Recognition

Awards: US Air Force CyberPatriot – Open Division National Champions, ACS Organic Chemistry Exam – 100th Percentile
Certifications: CompTIA Networking (2011), Security+ (2012)
Personal Interests: Meditation, Art: Japanese Sumi Ink, Graphic Design, Tai Chi, Cooking, Traveling and the Outdoors