hjames@ucsd.edu

Hailey James

Curriculum Vitae — November 2022

EDUCATION

University of California San Diego

Present GPA: 4.0/4.0

PhD Student Computer Science

Advisor: Berk Ustun

Research Topics: Human-Centered Machine Learning, Interpretability, Participatory Design

Relevant Coursework: Statistical Learning; Deep Generative Models; Graduate Machine Learning; Trustworthy Machine Learning; Interpretable & Explainable Machine Learning; Computer Security

& Privacy;

Harvard University May 2019

BA in Computer Science, Cum Laude in Field

Major GPA: 3.8/4.0 Relevant Coursework: Advanced Topics in Data Science; Intro to Machine Learning; Critical Thinking in Data Science; Data Science I; Research Topics in Human-Computer Interaction; Probability;

Theory of Networks; Theory of Computation; Programming Fundamentals; Functional Programming; Linear Algebra; Privacy and Technology; Discrete Mathematics

Industry

Twitter Cortex

 $May\ 2021-Oct\ 2021$

EXPERIENCE

Machine Learning Research Engineer, User Modeling

Investigated edge utility and impact on user experience using statistical methods and historical data Developed a scalable personalized value scoring pipeline for user recommendations using Python, BigQuery, and GCP

Lendbuzz OCT 2019 - MAY 2021

Machine Learning Engineer

Explored methods for explainability in risk-score approximation models

Developed and deployed three novel computer vision methods for detecting manipulations in digital documents using Python, Pytorch, and Tensorflow, improving upon current state-of-the-art methods Submitted each of these research projects to AI/ML conferences (currently in submission)

Facebook Jun 2018 - Sep 2018

Software Engineering Intern

Investigated content moderation for financial fraud and scam using human-AI cooperation Built reviewing interface for human reviewers to measure model performance and create training data using Hack (PHP), Python

AWARDS & Honors

United States Presidential Scholar 2013 Oracle Computing Research Scholarship 2017 Patel Teaching Fellowship 2018 Bill and Melinda Gates Foundation Scholarship 2013 - 2019Horatio Alger State Scholarship 2013 - 2019John. V. Kelleher Book Prize 2019

Publications

Google Scholar

Participatory Systems for Personalized Prediction

Hailey James, Chirag Nagpal, Katherine Heller, Berk Ustun NeurIPS Workshop on Trustworthy and Socially Responsible Machine Learning, 2022

Probabilistic Bias Mitigation in Word Embeddings

Hailey James, David Alvarez-Melis

NeurIPS Workshop on Human-Centric Machine Learning, 2019

3. Learning Document Graphs with Attention for Image Manipulation Detection

Hailey James, Otkrist Gupta, Dan Raviv

ICPRAI International Conference on Pattern Recognition and Artificial Intelligence, 2022

4. Printing and Scanning Investigation for Image Counter Forensics

Hailey James, Otkrist Gupta, Dan Raviv

EURASIP Journal on Image and Video Processing, 2021

Leadership & Service

AddisCoder

Lecturer and Teaching Assistant
Created curriculum, gave lectures, and worked individually with students in summer computer science course for 180 top Ethiopian high school students

Led 40 teaching assistants in course planning, curriculum development, and student instruction Was promoted to lecturer part-way through the program

Harvard Patel Fellow 2018

Teaching Fellowship

Led teaching staff in implementing pedagogical practices to support students of diverse backgrounds Taught functional programming to students in individual and small-group sessions 5-7 days per week Employed data management practices to track student progress and validate pedagogical choices

Harvard Women in Computer Science (WiCS)

2017

2019

Community Director

Planned and coordinated events for Harvard Women in Computer Science (WiCS)

Supported community-building activities and outreach efforts with faculty and other affinity groups

Personal Citizenship United States and Canada

Languages Fluent in English and French

Software Proficient in Python, PyTorch, Tensorflow, OCaml & SQL. Familiar with Java & PHP.

Organizations GradWIC (Graduate Women in Computing), oSTEM (LGBTQIA+ in STEM)

Interests Open-Water Swimming, Cycling, Squash and Steel Drum