

Candice Schumann

PH.D. STUDENT

✉ schumann@cs.umd.edu | 🏠 candiceschumann.com | 📧 candiceschumann | 📺 candice-schumann-08711792

Education

University of Maryland

PH.D. IN COMPUTER SCIENCE

- Focusing on Fairness and Diversity in Machine Learning.

College Park, MD

2015 - Exp. 2020

University of Maryland

MASTERS IN COMPUTER SCIENCE

- Focusing on Fairness and Diversity in Machine Learning.

College Park, MD

2015 - 2018

La Salle University

B.S. IN COMPUTER SCIENCE AND MATHEMATICS

- Graduated maxima cum laude.

Philadelphia, PA

2011 - 2014

Experience

Google

STUDENT RESEARCHER

- Continued working on machine learning fairness in image detection.

Remote

September. 2019 - December. 2019

University of Maryland

TEACHING ASSISTANT

- Teaching assistant for CMSC 320 - Data Science.s
- Taught 300 student lecture when main professor was away.

College Park, MD

August. 2019 - December. 2019

Google

RESEARCH INTERN

- Worked on machine learning fairness in image detection.

Mountain View, CA

May. 2019 - August. 2019

University of Maryland

RESEARCH ASSISTANT

- Working on topics in fairness and diversity in Machine Learning.
- Focusing on bringing diversity into an automated admissions system.

College Park, MD

Jan. 2017 - PRESENT

Google

SWE RESEARCH INTERN

- Worked on the problem of transferring ML fairness using domain adaptation.
- Proved theoretical bounds and produced a model which performs this transfer.

Mountain View, CA

June. 2018 - Sept. 2018

Varsity Tutors

TUTOR

- Tutor high school through graduate levels of computer science using Varsity Tutor's online platform.

Aug. 2017 - PRESENT

University of Maryland

RESEARCH ASSISTANT

- My research focused on finding interactions in the microbiome.

College Park, MD

Jan. 2016 - Dec. 2016

Einstein by Design

AFTERSCHOOL TEACHER AND CURRICULA DESIGNER

- I designed and taught STEAM and electronic afterschool classes to elementary school children.
- The curricula I designed are currently being used by Einstein by Design

Washington, DC

May. 2016 - Jan. 2017

University of Maryland

TEACHING ASSISTANT

- I taught a discussion section of CMSC 330 - Organization of Programming Languages.

College Park, MD

Aug. 2015 - Dec. 2015

SAP

INTERNET OF THINGS INTERN

- I developed scenarios where the Internet of Things could be used in the Insurance Industry.
- I built a proof of concept that included everything from the IoT micro-controller to the data analysis on SAP HANA.

Newtown Square, PA

Jan. 2015 - July. 2015

Florida Institute of Technology

REU FELLOW

- I worked in a small team that was looking at problems in functional data analysis.
- I worked on developing new methods for functional data classification.

Melbourne, FL

May. 2014 - July. 2014

Lewis and Clark College

REU FELLOW

- I was responsible for developing GPU parallel processing methods for Monte Carlo Tree Search for Computer Go.

Portland, OR

June. 2013 - Aug. 2013

La Salle University

WEB DEVELOPER

- I worked on the web development team on both front-end and back-end web development problems.

Philadelphia, PA

Oct. 2012 - Dec. 2014

La Salle University

STUDENT RESEARCHER

- I developed a greedy algorithm for the Fairy Tale card game.

Philadelphia, PA

May. 2012 - Aug. 2012

Publications

Group Fairness in Bandit Arm Selection

IN REVIEW

2020

Human Comprehension of Fairness in Machine Learning

IN REVIEW

2020

Transfer of Machine Learning Fairness across Domains

IN REVIEW

2020

We Need Fairness and Explainability in Algorithmic Hiring

AAMAS BLUE SKY

2020

Making the Cut: A Bandit-based Approach to Tiered Interviewing

CONFERENCE ON NEURAL INFORMATION PROCESSING SYSTEMS (NUEIPS)

2019

The Diverse Cohort Selection Problem

INTERNATIONAL CONFERENCE ON AUTONOMOUS AGENTS AND MULTIAGENT SYSTEMS

2019

An approach to the fairy tale card game

JOURNAL OF COMPUTING SCIENCES IN COLLEGES

2015

Presentations

Human Comprehension of Fairness in Machine Learning

POSTER AND PRESENTATION

AIES

February. 2020

Transfer of Machine Learning Fairness across Domains

POSTER

AI for Social Good at NeurIPS

December. 2019

Group Fairness in Bandit Arm Selection

POSTER

“Do the right thing”: machine learning and causal inference for improved decision making workshop at NeurIPS

December. 2019

Transfer of Machine Learning Fairness across Domains

PRESENTATION

University of Maryland

September. 2019

The Diverse Cohort Selection Problem

PRESENTATION

AAMAS

May. 2019

Diversity in Machine Learning

INVITED TALK

La Salle University

September. 2018

Fairy Tale Card Game: Knapsacks, Heuristics, and Artificial Intelligence

INVITED TALK

La Salle University

September. 2018

The Diverse Cohort Selection Problem

POSTER

Ph.D. in Research Conference, Google

July. 2018

The Diverse Cohort Selection Problem

POSTER AND PRESENTATION

Aligned AI Workshop at NIPS-17

December. 2017

The Diverse Cohort Selection Problem

POSTER

WiML Workshop at NIPS-17

December. 2017

The New White Hat Hacking Computational Biology for the Good of Mankind

PRESENTATION

DEFCON Biohacking Village

August. 2016

Cross-Platform Compatibility: Bringing Infosec Skills into the World of Computational Biology

PRESENTATION

BSidesLV

August. 2016