Jonathan C. **Stroud**

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Education

University of Michigan — *Ann Arbor, MI*
PH.D. IN COMPUTER SCIENCE & ENGINEERING — *Sep. 2015 – May 2020 (Expected)*
- Advisor: Jia Deng
- GPA: 3.98/4.00

University of Michigan — *Ann Arbor, MI*
M.S. IN COMPUTER SCIENCE & ENGINEERING — *Sep. 2015 – May 2017*
- GPA: 3.98/4.00

University of California, Irvine — *Irvine, CA*
B.S. IN COMPUTER SCIENCE — *Sep. 2011 – June 2015*
- Summa Cum Laude, GPA: 3.99/4.00
- Honors in Information and Computer Science
- Minors in Mathematics, Statistics, and Linguistics

Publications

Temporal Action Localization via Structured Maximal Sums
ZEHUAN YUAN, **JONATHAN STROUD**, TONG LU, JIA DENG
IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
July, 2017. Honolulu, Hawaii.

The Michigan Data Science Team: A Student Organization for Machine Learning Challenges
JONATHAN STROUD, ALEX CHOJNACKI, JACOB ABERNETHY
Neural Information Processing Systems (NIPS) Workshop on Challenges in Machine Learning
December, 2016. Barcelona, Spain.

Flint Water Crisis: Data-Driven Risk Assessment Via Residential Water Testing
JACOB ABERNETHY, CYRUS ANDERSON, CHENGYU DAI, ARYA FARAHI, LINH NGUYEN, ADAM RAUH, ERIC SCHWARTZ, WENBO SHEN, GUANGSHA SHI, **JONATHAN STROUD**, XINYU TAN, JARED WEBB, SHENG YANG
Bloomberg Data For Good Exchange
September, 2016. New York City, New York.

Data Science in Service of Performing Arts: Applying Machine Learning to Predicting Audience Preferences
JACOB ABERNETHY, CYRUS ANDERSON, ALEX CHOJNACKI, CHENGYU DAI, JOHN DRYDEN, ERIC SCHWARTZ, WENBO SHEN, **JONATHAN STROUD**, LAURA WENDLANDT, SHENG YANG, DANIEL ZHANG
Bloomberg Data For Good Exchange
September, 2016. New York City, New York, USA.

Presentations

2016 NIPS Worksop on Challenges in Machine Learning — *Barcelona, Spain*
ORAL PRESENTATION — *Dec. 2016*
"The Michigan Data Science Team: A Student Organization for Machine Learning Challenges"

Michigan Institute for Data Science Annual Symposium — *Ann Arbor, MI*
BEST STUDENT POSTER AWARD — *Nov. 2016*
"Data Driven Risk Assessments for the Flint Water Crisis"

Michigan Institute for Data Science Annual Symposium *Ann Arbor, MI*
Poster Presentation *Nov. 2016*
"The Michigan Data Science Team: A Student Organization for Machine Learning Challenges"

Michigan Institute for Data Science Annual Symposium *Ann Arbor, MI*
Poster Presentation *Nov. 2016*
"Inferring Alcohol Involvement in Fatal Car Accidents with Ensembled Classifiers"

#Micities Symposium *Ann Arbor, MI*
Oral Presentation *Oct. 2016*
"Data Driven Risk Assessments for the Flint Water Crisis"

Bloomberg Data For Good Exchange *New York, NY*
Oral & Poster Presentation *Sep. 2016*
"Flint Water Crisis: Data-Driven Risk Assessment Via Residential Water Testing"

Bloomberg Data For Good Exchange *New York, NY*
Oral Presentation *Sep. 2016*
"Data Science in Service of Performing Arts: Applying Machine Learning to Predicting Audience Preferences"

Meeting the Challenges of Safe Transportation in an Aging Society *Ann Arbor, MI*
Best Student Poster *Sep. 2016*
"Inferring Alcohol Involvement in Fatal Car Accidents with Ensembled Classifiers"

Student Symposium for Interdisciplinary Statistical Sciences *Ann Arbor, MI*
Poster Presentation *May 2016*
"The FARS Challenge: Inferring Alcohol Involvement in Fatal Car Accidents with Ensembled Classifiers"

UC Irvine Undergraduate Research Symposium *Irvine, CA*
Oral Presentation *May 2015*
"Precipitation Detection with Convolutional Neural Networks"

UC Irvine Undergraduate Research Symposium *Irvine, CA*
Oral Presentation *May 2014*
"Pixel-Based Gradient Boosting for Precipitation Estimation"

UC Irvine Undergraduate Research Symposium *Irvine, CA*
Oral Presentation *May 2013*
"Ensemble Learning and the Heritage Health Prize"

Professional Experience

Univerity of Michigan *Ann Arbor, MI*
Graduate Student Research Assistant *Apr. 2016 – Present*
- Department of Computer Science & Engineering
- Focus: Action localization and understanding, Computer Vision, Artificial Intelligence
- Advisor: Jia Deng

Michigan Data Science Team *Ann Arbor, MI*
Co-Founder and Organizational Chair *Sep 2015 – Present*
- Promoted data science interest and education on campus
- Assisted recovery from the Flint Water Crisis with data-driven risk assessments
- Recruited and mentored over 50 active members

University of California, Irvine *Irvine, CA*
Research Assistant *Sep. 2013 – Aug. 2015*
- Department of Computer Science
- Focus: Remote sensing with machine learning, Graphical Models, Probabilistic Inference
- Advisor: Alexander Ihler

Interdisciplinary Computatational and Applied Mathematics Program *Irvine, CA*

Summer Research Fellow *Summer 2012*

- Implemented data-driven risk assessments for hospital patients
- Scored top 7% worldwide in Heritage Health Prize Kaggle competition
- Advisors: Max Welling and Alexander Ihler

Awards & Honors

2016 **Honorable Mention, NSF Graduate Research Fellowship Program**

2016 **Oscar Miller Fellowship**
Funded first year of graduate study at University of Michigan

2015 **Outstanding Contribution to Research Award**
Awarded to two graduating seniors in the School of Computer Science

2015 **Deans List, University of California, Irvine**
12 quarters

2014 **Rose Hills Undergraduate Science and Engineeering Scholarship**
State-wide merit-based scholarship, $9000 award

2014 **Julian Feldman Scholarship in Information and Computer Science**
Departmental merit-based scholarship, $1200 award

2014 **Nominee, Dan and Jean Aldrich Memorial Scholarship**
Nominated as representative of the School of Computer Science

2014 **Summer Undergraduate Research Program Fellowship**
Funded independent summer research at UC Irvine

2014 **Phi Beta Kappa**
National honor society, inducted as a junior

Teaching Experience

University of California, Irvine

Volunteer Teaching Assistant – Machine Learning and Data Mining – CS178 *Winter 2015*
Instructor: Alexander Ihler

University of California, Irvine

Teaching Assistant – Interdisciplinary Computational and Applied Mathematics Program *Summer 2014*
Instructor: Alexander Ihler

Coursework

Graduate: Advanced Artificial Intelligence • Advanced Topics in Computer Vision • Machine Learning • Belief Networks • Algorithms • Microarchitecture • Independent Research

Undergraduate: Machine Learning and Data Mining • Artificial Intelligence • Computer Vision • Data Management • Data Analysis • Operating Systems • Software Engineering

Computer Skills

Languages: Python • C • C++ • Matlab • SQL • Java • Bash • Lua

Platforms & Software: Tensorflow • Torch • Caffe • Git • macOS • Windows • Linux • Kaggle