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: 3.91/4.00

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

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

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

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
CO-FOUNDER AND ORGANIZATIONAL CHAIR

Ann Arbor, MI
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
RESEARCH ASSISTANT

Irvine, CA
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
SUMMER RESEARCH FELLOW

Irvine, CA
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

Publications

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
ORAL PRESENTATION

Barcelona, Spain
Dec. 2016

"The Michigan Data Science Team: A Student Organization for Machine Learning Challenges"

Michigan Institute for Data Science Annual Symposium
BEST STUDENT POSTER AWARD

Ann Arbor, MI
Nov. 2016

"Data Driven Risk Assessments for the Flint Water Crisis"

Michigan Institute for Data Science Annual Symposium
POSTER PRESENTATION

Ann Arbor, MI
Nov. 2016

"The Michigan Data Science Team: A Student Organization for Machine Learning Challenges"

Michigan Institute for Data Science Annual Symposium
POSTER PRESENTATION

Ann Arbor, MI
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"

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

Computer Skills

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

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