

Jamell Dacon, Ph.D.

CONTACT INFORMATION

✉: jamell.dacon@morgan.edu | 🏠: Homepage | 📄: Google Scholar | in: LinkedIn | 🐦: Twitter

POSITIONS

📍: **Morgan State University**, MD, USA

Assistant Professor, Dept. of Computer Science
School of Computing, Mathematics and Natural Sciences (SCMNS)

Sep 2023 - Present

📍: **Michigan State University**, MI, USA

Instructor, Dept. of Computation, Mathematics, Science and Engineering (CMSE)
College of Natural Science + College of Engineering

May 2023 - Aug 2023

EDUCATION

📍: **Michigan State University**, MI, USA

– Doctor of Philosophy (**Ph.D.**): Computer Science

Jul 2023

◊ Dissertation: “*Conceptualizing Social Harms Arising from Bias and Discrimination in Natural Language Processing: Race, Gender & Language*”

◊ Research Area(s): Natural Language Processing; Fairness, Accountability, Transparency and Ethics (FATE) in AI; Computational Social Science; Data Science for Social Good

◊ Advisor: Dr. Jiliang Tang

– Master of Science (**M.S.**): Computer Science

May 2020

📍: **City University of New York (CUNY) – Medgar Evers College**, NY, USA

– Bachelor of Science (**B.S.**), *with honors*: Mathematical Sciences

Jun 2018

– Associates of Science (**A.S.**), *with honors*: Computer Science

Dec 2017

RESEARCH EXPERIENCE

Data Science and Engineering Lab, Michigan State University
Research Assistant, Computer Science and Engineering Department

Aug 2018 - Jul 2023

📍: East Lansing, Michigan, USA.

• Research Area(s): Natural Language Processing; Fairness, Accountability, Transparency and Ethics (FATE) in AI; Computational Social Science; Data Science for Social Good

★ Advisor: Dr. Jiliang Tang

Perception Team, Google Research
Research Intern

Oct 2022 - Jan 2023

📍: New York City, New York, USA.

★ Manager(s): Krishna Somandepalli & Alonso Martinez

★ Team Manager: Brendan Jou

• Research area(s): Fairness in Multi-modal Machine Learning

• Project(s): *LEXI: Auditing Lexical Diversity and Topic Distribution in 1M M3*

◊ Constructed robust pipeline to detect lexical diversity, creating a 5-step process to accurately identify differences in language structure, semantics and topic distribution.

◊ Developed optimized machine learning algorithms, executing 20+ rounds of computationally intensive tests, increasing speed of data processing by 200%.

- ◇ Designed automated pipeline to identify communicative trends between language and canonical features i.e., people characteristics such as age, gender and skin tone in a multimodal dataset of 1 million hours of videos.

Agile Analytics Team, Kimberly-Clark Cooperation
Research Intern

May 2022 - Aug 2022

📍 Roswell, Georgia, USA.

- ★ Manager: Mohammed Shammaa
- Research area(s): Agile Analytics, Data Analysis
- Project(s): *Predictive Modeling for Delivery Productivity*
- ◇ Developed automated prediction pipeline leveraging ML classification models to predict OTIF reason code failures, achieving accuracy rate of over 90%.
- ◇ Spearheaded experiments at both signal & data level with optimization algorithms, improving testing accuracy up to 12% in 12 weeks.
- ◇ Established a custom cost-benefit structure for monitoring model drift & alerting team when performance drops increasing effectiveness by 20%.

TEACHING EXPERIENCE

📍 **Michigan State University**, MI, USA

Instructor

Department of Computation, Mathematics, Science and Engineering (CMSE)
 Spelman College/ Michigan State University 3+2 Program

Summer 2023

- ◇ Course(s):
 - Introduction to Applied Linear Algebra, Data Structures and Algorithms, and Database Systems

Teaching Assistant

Department of Computer Science and Engineering (CSE)

Aug 2019 - Dec 2021

- ◇ Course(s):
 - CSE 102 - Algorithmic Thinking and Programming
 - CSE 231 - Introduction to Python

📍 **City University of New York (CUNY) – Medgar Evers College**, NY, USA

Teaching Assistant; Supplemental Instructor; Tutor

Oct 2014 - May 2018

Department of Mathematical Sciences

- ◇ Course(s):
 - MTHP 009 - Developmental Math
 - MTH 10CS10/WKSP - Cunystart Math/ MTH 10 Workshop
 - MTH 136 - Intermediate Algebra and Trigonometry
 - MTH 136C - Intergrated Elementary & Intermediate Algebra with Trigonometry
 - MTH 138 - Intermediate Algebra and Trigonometry
 - MTH 151 - Precalculus
 - MTH 202 - Calculus 1
 - CS 151 - Introduction to Computing
 - CS 241 - Discrete Structures
 - CS 244 - Object Oriented Programming and Design
 - CS 345 - Scientific Programming I: Data Analysis

PUBLICATIONS

- Sourabh Palande, Joshua A.M. Kaste, Miles D. Roberts, Kenia Segura Ab, Carly Claucherty, **Jamell Dacon**, Rei Doko, Thilani B. Jayakody, Hannah R. Jeffery, Nathan Kelly, Andriana Manousidaki, Hannah M Parks, Emily M Roggenkamp, Ally M Schumacher, Jiaxin Yang, Sarah Percival, Jeremy Pardo, Aman Y Husbands, Arjun Krishnan, Beronda L Montgomery, Elizabeth Munch, Addie M Thompson, Alejandra Rougon-Cardoso, Daniel H Chitwood, Robert VanBuren. “*Topological data analysis across the evolution of flowering plants reveals a core gene expression backbone that defines plant form and function*”, 2023. (**PLOS Biology**).
- **Jamell Dacon** and Jiliang Tang. “*Beyond Race and Gender: A Look at Sociodemographic Biases Toward Persons with Disabilities*”. In Proceedings in the 9th International Conference on Computational Social Science, 2023. (**IC²S² 2023**).
- **Jamell Dacon** and Jiliang Tang. “*Can We Identify and Dismantle ISMs that Plague Our Society: An Online Approach*”. In Proceedings in the 9th International Conference on Computational Social Science, 2023. (**IC²S² 2023**).
- **Jamell Dacon**, Haochen Liu and Jiliang Tang. “*Evaluating and Mitigating Inherent Linguistic Bias of African American English through Inference*”. In Proceedings in the 29th International Conference on Computational Linguistics, 2022. (**COLING 2022**).
- **Jamell Dacon**, Harry Shomer, Shaylynn L.A. Crum-Dacon, Jiliang Tang. “*Detecting Harmful Online Conversational Content towards LGBTQ+ Individuals*”. Queer in AI Workshop, 2022. (**NAACL 2022**).
- **Jamell Dacon**. “*Towards a Deep Multi-layered Dialectal Language Analysis: A Case Study of African-American English*”. In Proceedings of the 2nd Workshop on Bridging Human-Computer Interaction and Natural Language Processing, 2022. (**NAACL 2022**).
- **Jamell Dacon** and Jiliang Tang. “*Examining Word Representations between #BlackLivesMatter Movement and its Counter Protests: 2013 to 2020*”. In Proceedings in the 8th International Conference on Computational Social Science, 2022. (**IC²S² 2022**).
- **Jamell Dacon**. “*Understanding African American English on a Token-Level Beyond Accuracy*”. In Proceedings in the 8th International Conference on Computational Social Science, 2022. (**IC²S² 2022**).
- **Jamell Dacon**, Haochen Liu and Jiliang Tang. “*Using Inference to Mitigate Linguistic Bias Against African American English*”. In Proceedings in the 8th International Conference on Computational Social Science, 2022. (**IC²S² 2022**).
- Haochen Liu, Yiqi Wang, Wenqi Fan, Xiaorui Liu, **Jamell Dacon**, Lingjuan Lyu and Jiliang Tang. “*Trustworthy AI: A Computational Perspective*”. In Proceedings in the 31st International Web Conference, 2022. (**WWW 2022**).
- **Jamell Dacon** and Haochen Liu. “*Does Gender Matter in the News? Detecting and Examining Gender Bias in News Articles*”. In Companion Proceedings in the 30th International Web Conference, 2021. (**WWW 2021**).
- **Jamell Dacon** and Haochen Liu. “*Does Gender Matter in the News? Detecting and Examining Gender Bias in News Articles*”. In Proceedings in the 7th International Conference on Computational Social Science, 2021. (**IC²S² 2021**). (**Extended Abstract/Poster Presentation**)
- Haochen Liu, **Jamell Dacon**, Wenqi Fan, Hui Liu, Zitao Liu, and Jiliang Tang. “*Does Gender Matter? Towards Fairness in Dialogue Systems*”. In Proceedings in the 28th International Conference on Computational Linguistics, 2020. (**COLING 2020**).
- Tyler Derr, Zhiwei Wang, **Jamell Dacon**, and Jiliang Tang. “*Link and Interaction Polarity Predictions in Signed Networks*”. Social Network Analysis and Mining, 2020. (**SNAM 2020**).

Preprints

- **Jamell Dacon** and Jiliang Tang. “*What Truly Matters? Using Linguistic Cues for Analyzing the #BlackLivesMatter Movement and its Counter Protests: 2013 to 2020*”, 2021. (**Preprint**)

INVITED TALKS & PANELS

University of Massachusetts, LSA Summer Institute: Bridging Fieldwork, Corpus, and Experimental Methods to study Sociolectal Variation.	<i>Jul 2023</i>
University of Copenhagen, Mærsk Tower: Beyond Race and Gender: A Look at Sociodemographic Biases Toward Persons with Disabilities.	<i>Jul 2023</i>
Utah State University: Bias and Discrimination in NLP: Race and Gender.	<i>Apr 2023</i>
Stanford University–Computational Culture Lab: The Application of Computational linguistics tools being developed in Comp Sci–Applying them to questions of sociological/organizational interest.	<i>Dec 2022</i>
Queer in AI @ NAACL 2022: Gender as a Variable in NLP.	<i>Jul 2022</i>
The University of Chicago Booth School of Business, Chicago: Using Inference to Mitigate Linguistic Bias Against African American English.	<i>Jul 2022</i>
University of North Florida–Diversity and Inclusion (DIVE-IN) Talk Series: Using Linguistic Cues for Analyzing the #BlackLivesMatter Movement and its Counter Protests: 2013 to 2020.	<i>Oct 2021</i>
Voice Tech Global: Addressing Implicit Bias Towards the Black Community in Conversational Products.	<i>Jul 2020</i>

HONORS AND AWARDS

📍: Michigan State University

ERN: Emerging Researchers National Conference in STEM Travel Grant Award	<i>Dec 2022</i>
Best Poster Presenter Award from AGEP SSC 2022	<i>Oct 2022</i>
Best Oral Presenter Award from AGEP SSC 2022	<i>Oct 2022</i>
Google Conference Scholarship 2022	<i>Jul 2022</i>
Student Scholarship Award from IC ² S ² 2022	<i>Feb 2022</i>
Michigan State University Supplemental University Fellowship	<i>Feb 2022</i>
Student Scholarship Award from ICWSM 2021	<i>May 2021</i>
Student Scholarship Award from WWW 2021	<i>Mar 2021</i>
NSF Graduate Research Fellowship	<i>Aug 2020 - Aug 2023</i>
AAAI ICWSM Award 2020 for Black scholars	<i>Jun 2020</i>
Michigan State University Graduate Leadership Fellowship	<i>Jan 2020 - Dec 2020</i>
ICML Travel Grant Award	<i>Jul 2019</i>
Michigan State University Enrichment Fellowship (UEF)	<i>Aug 2018 - Aug 2023</i>

📍: City University of New York (CUNY) – Medgar Evers College

Medgar Evers College Annual Awards	<i>Apr 2018</i>
<ul style="list-style-type: none">• Award of Outstanding Academic Excellence• Certificate of Academic Excellence in Mathematics• Certificate of Academic Excellence in Computer Science• Certificate of College & Departmental Service	
CUNY Medgar Evers College Foundation Scholarship	<i>Apr 2018</i>
Google Research Scholarship	<i>Feb 2018</i>
NASA Space Grant Scholarship	<i>Jan 2018</i>
Brookhaven National Laboratory: Certificate of Scientific Programming in C++	

Health Care Career Pipeline (HCCP) Scholarship	May 2017
Provost's List	Apr 2016 - Jun 2018
Elite Scholars Award	Jan 2016
Umesh Nargakette Mathematics Scholarship	Nov 2015 & Nov 2016
Dean's List	Dec 2014 - Jun 2018

SERVICES

PC Member

- AI4EDU, AAAI 2023
- AAAI, NAACL 2022
- IJCAI, AAAI 2021
- ICML, AAAI 2020

Reviewer/ External reviewer

- ACL, NAACL, LREC, WWW 2022
- ACL-IJCNLP, KDD, WWW, NAACL, IJCAI 2021
- IEEE IRI, IEEE BigData, AAAI 2020

VOLUNTEERING

One Love Global - Non-Profit Organization

Volunteer/ Data Analyst

Feb 2022 - Present

- Detecting trends in disaggregated data to organize, educate and transform policy towards racial and healing justice utilizing data visualization tools. (**Ongoing**)
- Devised a sanctuary to gain a sense of belonging for Caribbean and African individuals of Lansing and East Lansing communities.
- Essentials Donation Drive
 - Organized an Extended Essentials Donation Drive partnering One Love Global and Michigan State University.
 - Partnered with Black Lives Matter Lansing Chapter to in hopes to give back to the communities.

QSIDE Datathon

Michigan State University Team Member

Oct 2021

- The goals are to collectively examine and analyze real-world criminal justice data to enhance our understanding of real-world social justice problems.

Voice Tech Global Panel

Panelist

Jul 2020

- Addressing Implicit Bias Towards the Black Community in Conversational Products.

AGEP Student Success Conference

Judge, Michigan State University

Nov 2019

- Evaluating several undergraduate and graduate posters where the conference schedule is designed to help students and job-seekers be successful at various stages of their career journey.

Guided Learning Center — Diversity Programs Office
Tutor, Michigan State University

Jul 2019

- Organized small class meetings for student to practice low-level mathematics.
- Tutored students in small groups for Math and Computer Science
- Conducted study sessions 14 hours a week for students in grasping mathematical and computer science concepts.

Summer Research Opportunities Program (**SROP**)
Mentor, Michigan State University

May 2019

- Mentored two African American students prospective students in computer science to aid the matriculation of underrepresented students

University Undergraduate Research and Arts Forum (**UURAF**)
Evaluator, Michigan State University

Apr 2019

- Evaluating several posters at the **UURAF** at MSU, where 927 undergraduate student researchers from all MSU colleges displayed their work.

Middle School Girls Math and Science Day
Presenter, Michigan State University

Mar 2019

- **Magical Recommendations** presentation explaining recommendation algorithms for E-commerce businesses.
- **Filters are Cool** presentation explaining how computer vision algorithms and social media filter operate.

SKILLS

- Programming: Python, PySpark, SQL, C/C++
- Web Technologies: HTML, CSS, Javascript
- Framework: PyTorch, Tensorflow, SciKit-Learn, Numpy, Scipy
- Data and Analytic Tools/ Coded using: Jupyter Notebook, Databricks, Tableau
- Operating Systems: Ubuntu, MacOS, iOS, WindowsOS