

Jamell Dacon, Ph.D.

CONTACT INFORMATION

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CURRENT POSITIONS

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

👤 **Assistant Professor**, Dept. of Computer Science *Sep 2023 - Present*
School of Computing, Mathematics and Natural Sciences (SCMNS)

👤 **Collaborator & Affiliate Faculty Member**, Center for Equitable Artificial Intelligence and Machine Learning Systems (CEAMLS) *Sep 2023 - Present*

👤 **Collaborator & Affiliate Faculty Member**, Institute for Trustworthy AI in Law and Society (TRAILS) *Sep 2023 - Present*

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

Machine Intelligence and Data Science Lab, Morgan State University *Sep 2023 - Present*
Principal Investigator & Director

📍 Baltimore, Maryland, USA.

- Research Area(s): Trustworthy AI; Fairness, Accountability, Transparency and Ethics (FATE) in AI; Data Science for Social Good; and AI+X

Data Science and Engineering Lab, Michigan State University *Aug 2018 - Jul 2023*
Research Assistant, Dept. of Computer Science and Engineering

📍 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 *Oct 2022 - Jan 2023*
Research Intern

📍 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 an 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%.

Software Development Team | WAVES
Research Intern

May 2020 - Aug 2020

📍 Lansing, Michigan, USA.

- Project(s): Modular Agent-Based Evolution (MABE) project
- Developed virtual CPUs for the Avida organisms.
- Built simple grid-based virtual worlds for organisms to move through and interact with.
- Extended and existing data management tools for fast and dynamic data manipulation.
- Improved unit tests and automatic testing suite.

Advanced Computational Research Experience for Students (ACRES),
Research Assistant

May 2017 - Jul 2017

📍 Lansing, Michigan, USA.

- Project(s): Investigating the Distribution and Diversity of Bacterial ACC-d to Promote Plant Growth During Abiotic Stress.
- Advisor: Dr. Ashley Shade
- Research area(s): Bioinformatics, Computational Biology
- ◇ Created tracking scripts to identify changes in target genes.
- ◇ Implemented a sequence alignment algorithms, to establish gene clusters across different habitats and among microbial lineages.
- ◇ Collaborated with a Principal Investigator and microbiologists to identify workflows and projects directions.

TEACHING EXPERIENCE

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

Instructor

Dept. of Computer Science (COSC)

Fall 2023

- ◇ Course(s):
 - COSC 111 - Introduction to Computer Science
 - COSC 352 - Organization of Programming Languages

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

Instructor

Dept. of Computation, Mathematics, Science and Engineering (CMSE)

Summer 2023

Spelman College/ Michigan State University 3+2 Program

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

Teaching Assistant

Dept. 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

Dept. of Mathematics + Dept. of Physical, Environmental and Computer Science

- ◇ 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

The following list consist of peer-reviewed Conference, Journal, Tutorials & Workshops Proceedings.

Please note the following symbols below to signify certain author types:

* | co-first authors

📄 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**) (Non-archival).

📄 **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**) (Non-archival).

📄 **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**) (Non-archival).

📄 **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**) (Non-archival).

- 📄 **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. (**TheWebConf 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. (**TheWebConf 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**) (Non-archival).
- 📄 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**. “*Are You Worthy of My Trust?: A Socioethical Perspective on the Impacts of Trustworthy AI Systems on the Environment and Human Society*”, 2023. (**Preprint**)
- 📄 **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

The following list consist of invited talks and panels.

Please note the following symbols below:

- 🗣️ | Speaker: Title
📍 | Location

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- | | |
|--|----------|
| 🗣️ Spelman College: Towards the Dark Side of Artificial Intelligence. | Oct 2023 |
| 📍 Atlanta, GA, USA | |
| 🗣️ University of Massachusetts–Amherst, LSA Summer Institute: Bridging Fieldwork, Corpus, and Experimental Methods to study Sociolinguistic Variation. | Jul 2023 |
| 📍 Amherst, MA, USA | |
| 🗣️ University of Copenhagen, Mærsk Tower: Beyond Race and Gender: A Look at Sociodemographic Biases Toward Persons with Disabilities. | Jul 2023 |
| 📍 Copenhagen, Denmark | |
| 🗣️ Spelman College: Detecting Gender Bias using Natural Language Processing + A Career in Biological Data Science. | Jun 2023 |
| 📍 Atlanta, GA, USA | |
| 🗣️ Utah State University: Bias and Discrimination in NLP: Race and Gender. | Apr 2023 |
| 📍 Logan, UT, USA | |
| 🗣️ Stanford University–Computational Culture Lab: The Application of Computational linguistics tools being developed in Comp Sci–Applying them to questions of sociological/organizational interest. | Dec 2022 |
| 📍 Stanford, CA, USA | |
| 🗣️ Queer in AI @ NAACL 2022: Gender as a Variable in NLP. | Jul 2022 |
| 📍 Seattle, WA, USA | |

- 📍 The University of Chicago Booth School of Business, Chicago: Using Inference to Mitigate Linguistic Bias Against African American English. *Jul 2022*
- 📍: Chicago, IL, USA
- 📍 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. *Oct 2021*
- 📍: Jacksonville, FL, USA
- 📍 Voice Tech Global: Addressing Implicit Bias Towards the Black Community in Conversational Products. *Jul 2020*
- 📍: Virtual

HONORS AND AWARDS

📍: Michigan State University

- ERN: Emerging Researchers National Conference in STEM Travel Grant Award *Dec 2022*
- Student Scholarship & Travel Award from COLING 2022 *Oct 2022*
- Best Poster Presenter Award from AGEP SSC 2022 *Oct 2022*
- Best Oral Presenter Award from AGEP SSC 2022 *Oct 2022*
- Google Conference Scholarship 2022 *Jul 2022*
- Student Scholarship & Travel Award from NAACL 2022 *Jul 2022*
- Student Scholarship Award from IC²S² 2022 *Feb 2022*
- Michigan State University Supplemental University Fellowship *Feb 2022*
- Student Scholarship Award from ICWSM 2021 *May 2021*
- Student Scholarship Award from TheWebConf 2021 *Mar 2021*
- NSF Graduate Research Fellowship *Aug 2020 - Aug 2023*
- AAAI ICWSM Award 2020 for Black scholars *Jun 2020*
- Michigan State University Graduate Leadership Fellowship *Jan 2020 - Dec 2020*
- ICML Travel Grant Award *Jul 2019*
- Michigan State University Enrichment Fellowship (UEF) *Aug 2018 - Aug 2023*

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

- Medgar Evers College Annual Awards *Apr 2018*
 - Award of Outstanding Academic Excellence
 - Certificate of Academic Excellence in Mathematics
 - Certificate of Academic Excellence in Computer Science
 - Certificate of College & Dept.al Service
- CUNY Medgar Evers College Foundation Scholarship *Apr 2018*
- Google Research Scholarship *Feb 2018*
- NASA Space Grant Scholarship *Jan 2018*
- 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*

EXTERNAL SERVICES

Workshop Organizer Chairships

- Workshop Lead-Organizer, Chair, Founder, Trustworthy AI: Addressing Socioethical Effects in Artificial Intelligence (ASEA) Workshop:
 - Hosted at the 38th Annual AAAI Conference on Artificial Intelligence (AAAI 2024)

PC Member

- AAAI, CHI 2024
- AAAI, AI4EDU 2023
- AAAI, NAACL 2022
- AAAI, IJCAI 2021
- AAAI, ICML 2020

Reviewer/ Sub-reviewer

- AAAI, ACL, DAMI, NAACL, TheWebConf 2023
- ACL, LREC, NAACL, TheWebConf 2022
- ACL-IJCNLP, IJCAI, KDD, NAACL, TheWebConf 2021
- AAAI, IEEE BigData, IEEE IRI 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

Team Member, Michigan State University

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.

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 Mathematics 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 in Computer Science Graduate Programs.

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

QR CODES



(a) Personal Homepage



(b) MINDS Lab at Morgan State University

Figure 1: QR Codes for accessibility.