KIANTÉ D. BRANTLEY

EMAIL:KDB82@CORNELL.EDU | **MOBILE:**(410) 982-5192 | **GITHUB:** xkianteb | **WEBSITE**:xkianteb.github.io

EDUCATION

University of Maryland, College Park
Ph.D. Computer Science **Fall 2016 – December 2022**
Advisor: Dr. Hal Daumé III
Thesis: Expert-In-The-Loop for Sequential Decisions and Predictions

New York University
Visiting Student, Center of Data Science **Fall 2018 – December 2022**
Hosted by: Dr. Kyunghyun Cho

University of Maryland, Baltimore County
M.S. Computer Science, **Fall 2015 – Spring 2016**
Advisor: Dr. Tim Oates
Thesis: BCAP: A Pruning Technique to Reduce Overfitting

B.S. Computer Science **Fall 2013 – Spring 2015**
Minor in Mathematics

The Community College of Baltimore County
A.A. Computer Science and A.A. Mathematics **Fall 2011 – Spring 2013**

EMPLOYMENT

Cornell University, Postdoctoral Associate **February 2022 – August 2024**
Mentored by: Thorsten Joachims

Microsoft Research, Summer Internship(s)
Microsoft Research, Redmond **May 2021 – August 2021**
Mentored by: Yizhe Zhang, Michel Galley, Bill Dolan

Microsoft Research, Montréal **May 2020 – August 2020**
Mentored by: Geoffrey J. Gordon and Soroush Mehri

Microsoft Research, NYC **May 2019 – August 2019**
Mentored by: Miro Dudík and Hal Daumé III

Microsoft Research, NYC **May 2018 – August 2018**
Mentored by: Miro Dudík and Hal Daumé III

US Department of Defense, Data Scientist **July 2010 – August 2017**
Former Positions:
- Cyber Data Analyst:
- DevOps Engineer
- Software Engineer, Distributed Dataflow

- Software Engineer, Testing Engineer
- Software Engineer, Hadoop Engineer
- High School Work-Study, Summer Internship

Social Security Administration, Summer Internship **June 2010 – August 2010**

Baltimore Convention Center, Waiter **March 2010 – June 2010**

McDonald, Cashier **January 2010 – June 2010**

Green House Cage, Prep Cook **June 2009 – September 2009**
June 2008 – September 2008
June 2007 – September 2007

SCHOLARSHIPS/FELLOWSHIPS

Computing Research Association (CRA) Post-Doc Fellowship	**2022**
Ann G. Wylie Dissertation Fellowship	**2021**
Microsoft Dissertation Research Grant	**2020**
ACM SIGHPC/Intel Computational and Data Science Fellowships	**2018**
NSF Louis Stokes Alliance for Minority Participation Bridge to the Doctorate Program (LSAMP BD) Fellowship	**2016**
University of Maryland College Park Dean's Fellowship	**2016**
Department of Defense Graduate Fellowship	**2015**
Transfer-Scholarships in Information Technology and Engineering (T-SITE) Scholar	**2013**
Maryland Senators and Delegates Scholarship	**2013**
Transfer Student Alliance Scholarship	**2013**
Howard P. Rawlings Educational Assistance Grant	**2013**
CCBC Foundation General Scholarship	**2013**

AWARDS/HONORS

Spotlight talk, Empirical Methods in Natural Language Processing	**2023**
Spotlight talk, International Conference on Learning Representations	**2023**
Spotlight talk, International Conference on Learning Representations	**2020**
2nd place, The New York Academy of Sciences Star Talks	**2020**
Top Reviewer, Empirical Methods in Natural Language Processing	**2020**
Sloan Research Fellow	**2017 – 2019**

PUBLICATIONS

Conference Papers

1. Jonathan Chang, Dhruv Sreenivas, Yingbing Huang, **Kianté Brantley**, Wen Sun
   Adversarial Imitation Learning via Boosting - *ICLR* 2024
   https://openreview.net/pdf?id=DuQkqSe9en

2. **Kianté Brantley,** Zhichong Fang, Sarah Dean, Thorsten Joachims
   Ranking with Long-Term Constraints - *WSDM 2023*
   https://arxiv.org/pdf/2307.04923

3. Felix Faltings, Michel Galley, **Kianté Brantley**, Baolin Peng, Weixin Cai, Yizhe Zhang, Jianfeng Gao, Bill Dolan
   Interactive text generation - *EMNLP 2023* **(spotlight talk)**
   https://arxiv.org/pdf/2303.00908

4. Anne Wu, **Kianté Brantley**, Noriyuki Kojima, Yoav Artzi
   lilGym: Natural Language Visual Reasoning with Reinforcement Learning - *ACL 2023*
   https://arxiv.org/abs/2211.01994

5. Rajkumar Ramamurthy, Prithviraj Ammanabrolu, **Kianté Brantley**, Jack Hessel, Rafet Sifa, Christian Bauckhage, Hannaneh Hajishirzi, Yejin Choi
   Is Reinforcement Learning (Not) for Natural Language Processing?: Benchmarks, Baselines, and Building Blocks for Natural Language Policy Optimization - *ICLR 2022* **(spotlight talk)**
   https://arxiv.org/pdf/2210.01241.pdf

6. **Kianté Brantley,** Soroush Mehri, Geoff Gordon
   Successor Feature Sets: Generalizing Successor Representations Across Policies - *AAAI* 2021
   https://ojs.aaai.org/index.php/AAAI/article/view/17399

7. **Kianté Brantley*,** Miroslav Dudik*, Thodoris Lykouris*, Sobhan Miryoosefi*, Max Simchowitz*, Aleksandrs Slivkins*, Wen Sun*
   Constrained episodic reinforcement learning in concave-convex and knapsack settings - *NeurIPS* 2020
   https://arxiv.org/pdf/2006.05051.pdf

8. **Kianté Brantley**, Amr Sharaf, Hal Daumé III
   Active Imitation Learning with Noisy Guidance - *ACL* 2020
   https://arxiv.org/pdf/2005.12801.pdf

9. **Kianté Brantley**, Wen Sun, Mikael Henaff
   Disagreement-Regularized Imitation Learning - *ICLR 2020* **(spotlight talk)**
   https://openreview.net/forum?id=rkgbYyHtwB

10. Sobhan Miryoosefi*, **Kianté Brantley***, Hal Daumé III, Miroslav Dudik, Robert Schapire
    Reinforcement Learning with Convex Constraints - *NeurIPS 2019*
    https://arxiv.org/abs/1906.09323

11. Sean Welleck, **Kianté Brantley**, Hal Daumé III, Kyunghyun Cho
    Non-Monotonic Sequential Text Generation - *ICML 2019*
    https://arxiv.org/abs/1902.02192

Workshop Papers

1. Ge Gao, Jonathan D Chang, Claire Cardie, **Kianté Brantley**, Thorsten Joachim
   Policy-Gradient Training of Language Models for Ranking - *Instruction Workshop 2023*
   https://arxiv.org/pdf/2310.04407.pdf

2. Jonathan D Chan*g, **Kiante Brantley***, Rajkumar Ramamurthy, Dipendra Misra, Wen Sun
Learning to Generate Better Than Your LLM - *FMDM Workshop 2023*
https://arxiv.org/pdf/2306.11816

3. Amr Sharaf, Shi Feng, Khanh Nguyen, **Kianté Brantley**, Hal Daumé III
The UMD Neural Machine Translation Systems at WMT17 Bandit Learning Task
Bandit Learning for Machine Translation Shared Task - *EMNLP 2017*
https://arxiv.org/abs/1708.01318

4. Ashwinkumar Ganesan, **Kianté Brantley**, Shimei Pan, Jian Chen (2015).
LDAExplore: Visualizing Topic Models Generated Using Latent Dirichlet Allocation -
Intelligent User Interfaces (IUI) - Textvis Workshop 2015
http://arxiv.org/pdf/1507.06593.pd

INVITED TALKS

Rochester Institute of Technology	**2023**
Wayfair	**2023**
NC State University	**2022**
Cornell NLP Seminar	**2022**
Google Brain Montréal	**2022**
University of Maryland UMIACS	**2021**
Microsoft Research Summit	**2021**
Adobe Research	**2020**
The New York Academy of Sciences	**2020**
Black in AI Workshop at ACL	**2020**

LEADERSHIP/ACTIVITIES/SERVICES

Area Chair

Empirical Methods in Natural Language Processing	**2023**

Reviewer

Special Interest Group on Information Retrieval	**2023**
ICML Workshop Spurious correlations, Invariance, and Stability	**2023**
Special Interest Group on Information Retrieval	**2023**
International Conference on Learning Representations	**2022 2023**
European Workshop on Reinforcement Learning	**2022 – 2023**
Empirical Methods in Natural Language Processing	**2020**
Conference on Neural Information Processing Systems	**2020 2023**
European Chapter of the Association for Computational Linguistics	**2020 2023**
Annual Conference of the Association for Computational Linguistics	**2020 – 2021 2023**
International Conference on Machine Learning	**2019 – 2021 2023**
Tapia Conference Scholarship Reviewer	**2019 – 2021 2023**
Black in Ai Admission	**2019**

Workshops

Co-chair, Interactive Learning for NLP workshop @ ACL and Neurips	**2021 – 2022**
Co-chair, NYU AI Winter School for underrepresented groups	**2021 – 2022**

Co-chair, Black in Ai at AAAI **2020**

Co-curricular

Participated, Cornell NextGen Professor **2023**
Volunteered, Ithaca College Central NY LSAMP symposium **2022**
Volunteered, WiNLP Panel at NAACL **2022**
Volunteered, UMD Doctoral Career Pathways **2022**
Participated, CMD-IT Academic Careers Workshop **2020**
Volunteered, Bitview (teaching high schoolers computer science) **2020**
Volunteered, Industry Mentor UMBC CWIT **2020**
Volunteered, Maryland Institute for Minority Achievement and Urban Education College/Career Conference **2017**
Volunteered, MSDE CTE/PLTW Conference Student Panel **2015 – 2017**
Volunteered, Western Tech High Open house **2013 – 2016**

TRAVEL SCHOLARSHIPS/GRANTS

Computing Research Association (CRA) Underrepresented Minorities + Persons with Disabilities (URMD) Grad Cohort Conference Scholarship **2018 – 2019**

Neural Information Processing System (NeurIPS) Blacks in AI Workshop Scholarship **2017 – 2018**

National Society of Blacks in Computing (NSBC) Annual Conference Scholarship **2016 – 2017**

CERTIFICATIONS

Object-Oriented Programming Certificate **2013**
Community College of Baltimore County
The certificate is designed for career programmers who wish to add programming language to their skills.

TECHNICAL REPORTS

Kianté Brantley, Jingling Li, Fenfei Guo **2017**
A Study of Deep Reinforcement Learning for Sentence Compression

Amr Sharaf, **Kianté Brantly**, Parsa Saadatpanah, Ali Shafahi **2017**
Recurrent Neural Network for Sequence-to-Sequence Reinforcement Learning

Kianté Brantly, Bamidele Suarau, Seth Mosgin **2015**
Experimental Comparison of Density-Based Spatial Clustering of Applications with Noise (DBSCAN) using k-d Trees vs. using VP Trees

Kianté Brantly, Bamidele Suarau **2015**
Comparing the effect of compression using PCA and DAE on classifier performance in predicting Epileptic Seizures from EEG data

REFERENCES

1. Hal Daumé III
   Professor, Computer Science Department, University of Maryland – College Park
   hal3@umd.edu

2. Thorsten Joachims
   Professor, Department of Computer Science, Cornell University
   tj@cs.cornell.edu

3. Geoffrey J. Gordon
   Professor, Department of Machine Learning, Carnegie Mellon University
   ggordon@cs.cmu.edu

4. Miro Dudík
   Sr Principal Researcher Manager, Mirosoft Research New York
   mdudik@microsoft.com

5. Wen Sun
   Assistant Professor, Department of Computer Science, Cornell University
   ws455@cornell.edu