Arjun Subramonian (they/them) Email: arjunsub@cs.ucla.edu

Computer Science Department Website: arjunsubramonian.github.io

University of California, Los Angeles

Publications: Semantic Scholar, Google Scholar
GitHub: github.com/ArjunSubramonian

Research Interests

graph machine learning, natural language processing, fairness, justice, ethics

Education

PHD in Computer Science; University of California, Los Angeles (2021-Present), GPA: 3.925 NSF MENTOR Fellow, Eugene V. Cota-Robles Fellow *Advisors:* Yizhou Sun, Kai-Wei Chang

BS in Computer Science; University of California, Los Angeles (2018-2021), GPA: 3.927 Summa Cum Laude

Work Experience

Research Intern; Meta Society and Responsible AI (2022) Research Intern; Microsoft Research FATE (2022)

Privacy Research Intern; Snap, Inc. (2021)

Allen NLP Research Engineering Intern; Allen Institute for Artificial Intelligence (2021)

Software Engineering Intern; Microsoft Corporation (2020)

Software Engineering Intern; Get Heal, Inc. (2019)

Conference and Journal Papers

 $Factoring \ the \ Matrix \ of \ Domination: A \ Critical \ Review \ and \ Reimagination \ of \ Intersectionality \ in \ AI \ Fairness, \ \textit{arXiv}$

Anaelia Ovalle, **Arjun Subramonian**, Vagrant Gautam, Gilbert Gee, Kai-Wei Chang

AIES 2023 (28.9% acceptance rate)

Ethical Unaffordances: Collaboratively Developing Evaluation Frameworks for Queer AI Harms

Organizers Of QueerInAI, Nathan Dennler, Anaelia Ovalle, Ashwin Singh, Luca Soldaini, **Arjun Subramonian**, Huy Tu, William Agnew

AIES 2023 (28.9% acceptance rate)

It Takes Two to Tango: Navigating Conceptualizations of NLP Tasks and Measurements of Performance Thereon Arjun Subramonian, Xingdi Yuan, Hal Daumé III, Su Lin Blodgett

Findings of ACL 2023

Queer In AI: A Case Study in Community-Led Participatory AI, arXiv

Organizers of QueerInAI, Anaelia Ovalle, Arjun Subramonian, ...

FAccT 2023 (24.5% acceptance rate)

On the Discrimination Risk of Mean Aggregation Feature Imputation in Graphs, URL

Arjun Subramonian, Kai-Wei Chang, Yizhou Sun

NeurIPS 2022 (25.6% acceptance rate)

Queer in AI, URL

Organizers of QueerInAI, Hetvi Jethwani*, **Arjun Subramonian***, William Agnew*, MaryLena Bleile*, Sarthak Arora*, Maria Ryskina*, Jeffrey Xiong*

XRDS: Crossroads, The ACM Magazine for Students, Volume 28, Issue 4

On Dyadic Fairness: Exploring and Mitigating Bias in Graph Connections, URL Arjun Subramonian

ICLR 2022 Blogpost Track (32% acceptance rate)

Harms of Gender Exclusivity and Challenges in Non-Binary Representation in Language Technologies, URL

Sunipa Dev, Masoud Monajatipoor*, Anaelia Ovalle*, **Arjun Subramonian***, Jeff M Phillips, Kai-Wei Chang EMNLP 2021 Oral (9.8% acceptance rate), WiML Un-Workshop @ NeurIPS 2021.

MOTIF-Driven Contrastive Learning of Graph Representations, *URL* Arjun Subramonian

Undergraduate Consortium @ AAAI 2021 (17% acceptance rate)

Automated, Cost-Effective Optical System for Accelerated Antimicrobial Susceptibility Testing (AST) Using Deep Learning, URL

Calvin Brown, Derek Tseng, Paige M. K. Larkin, Susan Realegeno, Leanne Mortimer, **Arjun Subramonian**, Dino Di Carlo, Omai B. Garner, Aydogan Ozcan

ACS Photonics

Estimating the Ages of FGK Dwarf Stars Through the Use of GALEX FUV Magnitudes, URL

Sara Crandall, Graeme H. Smith, **Arjun Subramonian**, Kelly Ho, Evelyn M. Cochrane Astronomical Journal

Workshop Papers

Group Excess Risk Bound of Overparameterized Linear Regression with Constant-Stepsize SGD, URL

Arjun Subramonian, Levent Sagun, Kai-Wei Chang, Yizhou Sun

Trustworthy and Socially Responsible Machine Learning @ NeurIPS 2022

You Reap What You Sow: On the Challenges of Bias Evaluation Under Multilingual Settings, URL

Zeerak Talat, Aurélie Névéol, Stella Biderman*, Miruna Clinciu*, Manan Dey*, Shayne Longpre*, Alexandra Sasha Luccioni*, Maraim Masoud*, Margaret Mitchell*, Dragomir Radev*, Shanya Sharma*, **Arjun Subramonian***, Jaesung Tae*, Samson Tan*, Deepak Tunuguntla*, Oskar van der Wal*

Challenges & Perspectives in Creating Large Language Models @ ACL 2022

How to Make Virtual Conferences Queer-Friendly: A Guide, URL

Organizers of QueerInAI, A Pranav, MaryLena Bleile, **Arjun Subramonian**, Luca Soldaini, Danica Sutherland, Sabine Weber, Pan Xu, William Agnew, Michael McKenna, Nyx McLean WiNLP 2021 Workshop @ EMNLP 2021

Motif-Driven Contrastive Learning of Graph Representations, arXiv

Shichang Zhang, Ziniu Hu, **Arjun Subramonian**, Yizhou Sun Self-Supervised Learning @ WWW 2021

Queer | Inclusive | Badass, URL Arjun Subramonian

Resistance AI Workshop @ NeurIPS 2020

Preprints

BLOOM: A 176B-Parameter Open-Access Multilingual Language Model, arXiv

Teven Le Scao, Angela Fan, Christopher Akiki, ..., Arjun Subramonian, ..., Yacine Jernite, Younes Belkada, Thomas Wolf

Explaining Attention-Based Graph Neural Networks Post-Hoc With Attention Flows, URL

Paymon Haddad*, Arjun Subramonian*, Brian Tagle*

Selecting Core Subgraphs for Efficient Graph Neural Network Training, *URL* Arjun Subramonian*, Harsh Chobisa*

Twitter Saliency Algorithm: Identifying Unintentional Harms to Gender Non-Conforming Individuals, *URL* Arjun Subramonian*, Michael McKenna*

Fairness and Bias Mitigation: A practical guide into the AllenNLP Fairness module, *URL* Arjun Subramonian

Robust Model-Agnostic Meta-Learning for Binary Content Moderation Tasks in Natural Language Processing, *URL* Arjun Subramonian*, John Arthur Dang*

Invited Talks

2023 - Bias and Power in NLP, USC ISI Natural Language Seminar; Event, Slides, Video

2022 - Bias and Power in NLP (for future consultants), Paris; Slides

2022 - Bias and Power in NLP, NLP Seminars at Dublin College University; Slides

2022 - Guest Lecture: Bias in Natural Language Processing, COM SCI 263: NLP, UCLA; Slides, Video

2022 - Queer in AI: Making AI Queer-Inclusive and Prioritizing Grassroots D&I Activism, Humlab, Umeå University; Slides, Video

2022 - Prioritizing Grassroots D&I Activism: Queer in AI, AAAI Workshop on Diversity in Artificial Intelligence; Event, Slides

2022 - Prioritizing Grassroots D&I Activism: Queer in AI, Nike Sport+AI Conference; *Event*, *Slides*

2021 - How Can I Make My Hackathon Queer-Inclusive?, Hackcon IX; Slides, Video

2019 - An Automated and Cost-Effective System for Early Antimicrobial Susceptibility Testing Using Optical Fibers and Deep Learning, UCLA HHMI Day; *Slides*

Invited Panels

2022 - Accessibility and Inclusion Panel, Neuromatch Academy; Video

2022 - Gender as a Variable in NLP, NAACL Queer in AI Workshop; Event, Video

2022 - Co-Opting AI: Queer, NYU's Institute for Public Knowledge; Event, Video

2022 - How Do We Improve DEI in AI?, Nike Sport+AI Conference

2021 - Eye on A.I.: Equity & Inclusion in A.I. Technology, Toronto Public Library; Video

2021 - Intersectionality Panel, NAACL; Video

Honors

2022 - NSF MENTOR Fellowship

2021 - AI2 Outstanding Intern of the Year; Site

2021 - MLH Top 50; Site

2021 - UCLA Samueli School-Wide Outstanding Bachelor of Science; Site

2021 - UCLA Chancellor's Service Award; Site

2021 - UCLA Samueli Engineering Achievement Award in Student Welfare; Site

2021 - UCLA Eugene V. Cota-Robles Fellowship

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2021 - Boeing Company Scholarship
2021 - Brian J. Lewis Endowment
2018-2021 - UCLA Dean's Honors List
2020 - Computing Research Association Outstanding Undergraduate Researcher Honorable Mention; Site
2020 - IBM Quantum Challenge
2019 - 3rd Place Award for Best Hack @ Rose Hack, Major League Hacking
2017 - Siemens Competition Regional Finalist; Site
2016 - Award of Achievement, Association for Computing Machinery, San Francisco Bay Area Professional Chapter
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Service

- Reviewing:
 - Conferences: NeurIPS 2023, KDD 2023, FAccT 2023, LoG 2022, FAccT 2022
 - Workshops: TrustNLP @ ACL 2023, GLFrontiers @ NeurIPS 2022, TSRML @ NeurIPS 2022, TrustNLP @ NAACL 2022, SRW @ NAACL 2022, WOAH @ NAACL 2022, BigScience @ ACL 2022
- Teaching:
 - UCLA: Computer Science 32 (2023), Computer Science Summer Institute (2022, 2023)
 North Hollywood High School: Intro to Machine Learning
 - EDI: Guide on Gender and Pronouns for Instructors
- Conference organization:
 - NeurIPS Affinity Workshops Chair (2022, 2023)
 - KDD EDI Day Chair (2023)
 - NAACL Accessibility Chair (2022)
- Workshop organization:
 - Queer in AI: AAAI 2021, ICML 2021, NeurIPS 2021, FAccT 2022, NAACL 2022, ICML 2022, ACL 2023
 - Collaboratively Developing Evaluation Frameworks for Queer AI Harms @ FAccT 2022
- Equity, Diversity, & Inclusion (EDI):
 - Queer in AI core organizer
 - Guides on Publication Accessibility, Quality, and Inclusivity and Poster and Talk Accessibility, Quality, and Inclusivity
 - UCLA Samueli Standing Committee on Diversity member
 - AllenNLP Hacks organizer
 - QWER Hacks co-founder and organizer
 - ACM at UCLA EDI director
 - ACM AI at UCLA outreach director
 - "You Belong in AI!" podcast creator and producer

Mentoring

I am fortunate to mentor brilliant students:

- Margaret Capetz
- · Naisha Agarwal

References

Yizhou Sun (yzsun@cs.ucla.edu) Kai-Wei Chang (kwchang@cs.ucla.edu) Aydogan Ozcan (ozcan@ucla.edu)