Anaelia A. Ovalle (they/them)

Los Angeles, California
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EDUCATION

University of California - Los Angeles (UCLA), September 2019 - Present
Ph.D. Computer Science
Tentative Dissertation: Centering historically marginalized communities to inform algorithmic social justice praxis. Towards Inclusive Natural Language Processing and Sociotechnical Harm Reduction

University of San Francisco, *May 2017*
B.S. Data Science, Conc. Economic Analytics *GPA: 3.75/4*
Magna Cum Laude

EXPERIENCE

Applied Scientist Intern *June 2022 - Sept 2022*
Amazon Alexa, Los Angeles, CA (Remote)

- *Designed and created benchmark dataset, automatic metrics, and AMT experiments that centered trans-inclusivity for language generation technnologies.*
- *Led interfacing with teams across Alexa to design and improve linguistic experiments*

Research Scientist Intern *June 2021 - October 2021*
Facebook Responsible AI (FAIAR), New York, NY (Remote)

- *Developed and applied fair representation learning methods for assessing producer fairness with respect to models used to source content on Instagram.*

Graduate Student Researcher *September 2020 - Present*
UCLA, Los Angeles, CA

- *Measuring health disparities through algorithmic fairness principles in electronic healthcare records*
- *Evaluating algorithmic impacts and harms from lack of gender representation within natural language processing systems*
- *Worked with the Center for Disease Control and the UCLA Center for the Study of Racism, Social Justice & Health to navigate COVID-19 stigma in minority communities. Using Twitter and Google Trends to assess the racial climate and experimenting with ML fairness techniques to evaluate effects of missing data.*

Applied Science Intern *June 2020 - September 2020*
Amazon Prime Video, Los Angeles, CA (Remote)

- *Created a racist content discovery model by developing a 2-stage class-agnostic racist logo detection and recognition pipeline using films from Amazon Prime Video. The model was used to assist in viewer decision-making and regional Prime Video compliance.*

Data Scientist *September 2017 - August 2019*
Unity Technologies, San Francisco, CA

- *Enabled game developer success by optimizing for customer lifetime value. Improved ad spend by >5 % (>$500,000), deployed 2 new products with over*

100,000 daily active users, resulting in an average lift of over 20% in total revenue for our developers

- *Nurtured data-driven initiatives for in-app purchase recommendation and personalized ad placements in a fast-paced and cross-functional team. To do this, I implemented and productized reinforcement learning and deep learning algorithms, designed A/B tests, and provided actionable insights to guide product management.*

Data Science Intern *May 2017 - August 2017*
Unity Technologies, San Francisco, CA

- *Leveraged the Unity Game Engine and game-play data to create player engagement models that laid the foundation for player churn prevention strategy. Used Pyspark and Tensorflow to implement multiple machine learning algorithms (e.g.logistic regressions, XGBoost, various deep neural network topologies) in a mobile game setting.*

Academic Projects *Present*
Los Angeles, CA

- *Balancing Invariance and Sensitivity Defense for Adversarial Robustness using Metric Learning*
- *Multimodal Style Transfer for Image Caption Generation: A Humorous Study*
- *Exploring Latent Fairness with Text Style Transfer using a Variational Autoencoder to Disentangle Text Style on PyTorch*

SELECTED PUBLICATIONS

Ford C.L., Amani B., Harawa N.T., Akee R., Gee G.C., Sarrafzadeh M., Abotsi-Kowu C., Fazeli S., Le C., Nwankwo E., Zamanzadeh D., ***Ovalle A.****, Ponder M.L. Adequacy of Existing Surveillance Systems to Monitor Racism, Social Stigma and COVID Inequities: A Detailed Assessment and Recommendations. International Journal of Environmental Research and Public Health. 2021; 18(24):13099.*

Fazeli S., ***Ovalle A.****, Zamanzadeh D., Sarrafzadeh M.,Gilbert C. G., Thu T. N. Identifying COVID-19 signs, symptoms, and health impacts using natural language processing on Twitter data. Race, Place and Social Context: Conceptual, Methodological and Empirical Contributions session at the Society for Epidemiological Research Annual Meeting. February 2021.*

Dev S., Monajatipoor M., ***Ovalle A.****, Subramonian A., Philips J., Chang K.W. Harms of Gender Exclusivity and Challenges in Non-Binary Representation in Language Technologies. Empirical Methods in Natural Language Processing. May 2021.*

Hardy, N., Zeba, F., ***Ovalle, A.****, Yanac, A., Nzugang-Noutonsi, C., Abadier, M., Ovalle, A. and Chahin, A.. Association of Prescription Opioid Use on Mortality and Hospital Length of Stay in the Intensive Care Unit. PloS one. April 2021.*

Ovalle A.*, Goldstein O., Kachuee M., Wu E., Holloway I.W., Sarrafzadeh M. Leveraging Social Media Activity and Machine Learning for HIV and Substance Abuse Risk Assessment. Journal of Medical Internet Research. February 2021.*

Attiga Y., Chen S., ***Ovalle A.****, LaGue J. Predicting Thyroid Disorder with Deep Neural Networks. Paper presented at: 9th Annual IEEE Annual Information Technology, Electronics, & Mobile Communication Conference. 2018 November 1; University of British Columbia, CA*

*Ma J., **Ovalle A.**, Woodbridge D.M. Medhere: A Smartwatch-Based Medication Adherence Monitoring System Using Machine Learning and Distributed Computing. Paper presented at: International Conference of the IEEE Engineering in Medicine and Biology Society. 2018 July 17; Honolulu, HI*

SELECTED PRESENTATIONS

*Zeba F., **Ovalle A.**, Yanac A., Nzugang-Noutonsi C., Abadier M., Ovalle A., Chahin A. Effect of Prescription Opiate Use on Mortality and Length of Stay in the Intensive Care Unit: A MIMIC-III study. ACP Annual Meeting. 2019 January 16; Providence, RI*

*Souiad R., Lu C., **Ovalle A.**, Castillo C., Haq M., Kharabi A., Witherby S., Chahin A. Incidental Steroid Use May Worsen Outcomes in Patients with HIT in the ICU Setting. Poster presented at: ACR/ARHP Annual Meeting. American College of Rheumatology; 2018 October 21; Chicago, IL*

*Ma J., **Ovalle A.**, Woodbridge D.M. Medication Adherence Monitoring using Machine Learning. Poster presented at: IEEE International Conference on Biomedical and Health Informatics. 2018 March 4; Las Vegas, NV*

*Attiga Y., Chen S., **Ovalle A.**, LaGue J. Deep Neural Networks: Using Demographic Data to Predict Thyroid Disorder. Poster presented at: Graduate Student Academic Showcase. University of San Francisco; 2017 April 24; San Francisco, CA*

*Oropeza T., Fernando L., **Ovalle A.**, Rosenfield E. App Inventor Java Bridge. Poster presented at: University of San Francisco Computer Science Night; 2016 November 30; San Francisco, CA*

AWARDS & DISTINCTIONS

NSF NRT Program Trainee *August 2021*

Ford Fellowship Honorable Mention *March 2021*

GEM Full Fellowship *March 2020*

- *Awarded full tuition and fees up to, and including, the fifth year of my PhD program sponsored through a collaborative fellowship between Amazon and UCLA.*

Eugene V. Cota Robles *September 2019*

- *Awarded UCLA's most prestigious diversity fellowship. Includes four years of funding by the University of California Office of the President, the UCLA Graduate Division, and the UCLA home department, for entering PhD students that are interested in a career in college or university teaching and research.*

The Anita Borg Systers Pass It On Award *September 2018*

- *Cash prize of up to $1,000 to fund and pass on the benefits of a computer science project to support other women in technology.*

USF Senior Leadership Award *May 2017*

- *Given to a maximum of three graduating seniors who have consistently worked and succeeded in enriching and impacting student life and is committed to the values of Student Life throughout their career at USF.*

USF 'Changes the World From Here' Academic Research Award *November 2016*

- *Given to one graduate research group at USF for excellence in academic research with a high impact potential.*

National Center for Women & IT Student Seed Awards *March 2016, 2017*

- *Student funding of $3,000 given to five Women in Computer Science groups interested in expanding their impact through existing and new programs on their campus and in their geographic region.*
- *Went on to receive amplification award of $5,000 the following year to continue club programming.*

UNIVERSITY AND PROFESSIONAL MEMBERSHIPS

UCLA Graduate Women in Computer Science, Chair *September 2019 - Present*
Computer Science Graduate Student Association, Member *September 2019 - Present*
Pi Mu Epsilon, California Rho Chapter, Member *May 2017 - Present*
Association of Computing Machinery, Member *September 2016 - Present*