Danilo Symonette

1735 Woodland Ave, Apt 40, East Palo Alto, California 94303 · (240) 676 4831 · dlonzell@stanford.edu

EDUCATION

Stanford University, Ph.D. Computer Science May 2028

University of Maryland, Baltimore County, B.S. Computer Science May 2020

College of Southern Maryland, A.S. Computer Science May 2017

RELEVANT EXPERIENCE

Stanford University, Palo Alto, CA

Graduate Researcher, Stanford HCI Group, Advised by James Landay August 2022 – Present

After spending a year rotating through three different labs across the fields of HCI, VR, and NLP/AI, I've aligned with prof. James Landay and am developing my understanding of the problems in VR and Multimodal Interaction through engagement in research.

- Studying multimodal interaction in XR applied to language learning
- Conducting a grounded-theory based ethnography on VR in the classroom in collaboration with prof. Jeremy Bailenson

Johns Hopkins University Applied Physics Laboratory, Laurel MD

Associate Staff I, Research and Exploratory Development Department August 2020 – August 2022

In my two years at APL, I was invested significantly in developing the Precision Learning (PL) Research Area at APL. I supported the CIRCUIT Program in both leadership and technical roles, developed prototypes, and helped write grants and proposals to push our ideas forward.

- Supported the CIRCUIT program by designing the 2021 training curriculum and developing a knowledge base of learning resources for AI and Data Science and developed an interface for producing personalized training plans based on an assessment of individual skillsets.
- Developed a prototype system for on-demand training content, and an interactive visualization for core data science and AI concepts
- Studied the use of VR to explore and label neuroimaging data

Massachusetts Institute of Technology, Cambridge, MD

Summer Research Assistant, Teaching Systems Lab June 2019 – August 2019

This research aimed to define a method for detecting struggle and confusion in audio data collected from user interactions with the teacher education software, *Teacher Moments*

- Trained models using features from speech patterns and text transcripts in order to detect emotions of struggle and confusion in voice data
- Engineered prosodic and linguistic features for training a machine learning model using a combination of LightSide, IBM Watson, and python audio analysis libraries
- Co-authored a paper on the relationship between cognitive dissonance and mixed emotions for AERA conference

University of Maryland, Baltimore County (UMBC), Catonsville, MD

Undergraduate Research Assistant, AVAIL Lab January 2018 – August 2020

Our research aim was to use machine learning to evaluate students' teamwork competency.

- Programmed data crawler and API for extracting chat data from Slack and GroupMe
- Employed supervised learning techniques to identify high-performing teams using text and psycho-linguistic features from conversation data
- Performed statistical analysis of message and group data to gain insight about team performance and student self-ratings

PUBLICATIONS

- Rohan Ahuja*, Daniyal Khan*, Danilo Symonette*, Marie desJardins, Simon Stacey, and Don Engel. 2019. A Digital Dashboard for Supporting Online Student Teamwork. In Conference Companion Publication of the 2019 on Computer

Supported Cooperative Work and Social Computing (CSCW '19). Association for Computing Machinery, New York, NY, USA, 132–136. https://doi.org/10.1145/3311957.3359490

- Rohan Ahuja, Daniyal Khan, Danilo Symonette, Shimei Pan, Simon Stacey, and Don Engel. 2020. Towards the Automatic Assessment of Student Teamwork. In Companion Proceedings of the 2020 ACM International Conference on Supporting Group Work (GROUP '20). Association for Computing Machinery, New York, NY, USA, 143–146. https://doi.org/10.1145/3323994.3369894
- Hillaire, G. Thompson, M., Slama, R**.,** Symonette, D., Reich, J. *Analyzing the relationship between cognitive dissonance and mixed emotion to support emotion regulation in teachers*. Proceedings of the American Educational Research Association Annual Conference (AERA 2020)

AWARDS

- **National Science Foundation Graduate Research Fellowship,** Spring 2020