Mariel Tisby

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EXPERIENCE

Volunteer July 2021 - Present

Coding 4 Community | International Non-Profit

New full-stack web developer for the non-profit organization, Coding 4 Community. Create websites and applications for other non-profit organizations per their requests.

CEO & UX Designer

Health Informatics Course | Irvine, CA

Our team created a user-friendly app specifically focused on chest pains. The questionnaire structure was based on OPQRST questions, the structure used by physicians in emergency settings, and had open ended questions for detailed data.

- git link: https://github.com/DecimaViktor/INF172Project
- Proposal:

 $\underline{https://docs.google.com/presentation/d/1cqyMvVFZ5GStR3Q39UtEPQg4t8HHm-oYkPxKfffoQBg/edit?usp=sharing} \\$

Research Assistant April 2019 - Nov. 2020

UCI Human Neuroscience Lab | Irvine, CA

Collected and analyzed over 30 subject's behavioral and EEG multidimensional data. Used Bayesian hierarchical diffusion modeling to model three elements of reaction time, visual processing, decision making, and motor reactions. My tasks included EEG preprocessing and modeling of EEG data using Python and MATLAB.

Key Accomplishments:

Publication:
https://www.researchgate.net/publication/348690358 A macro-level perspective on evidence accumulation during decision_making

Research Assistant Sept. 2018 - June 2020

UCI Visual Perception and Neuroimaging Lab | Irvine, CA

Collected and analyzed over 30 subjects fMRI and DTI multidimensional data. Modelled structural connectivity between brain regions using MATLAB and DSI-Studio. Conducted literature reviews and contributed to publications.

Key Accomplishments:

- University of Irvine, California Summer Undergraduate Research Program Fellow (Link to proposal)
- Publication: Daniel A Stehr, Xiaojue Zhou, Mariel Tisby, Patrick T Hwu, John A Pyles, Emily D Grossman, Top-Down Attention Guidance Shapes Action Encoding in the pSTS, *Cerebral Cortex*, 2021;, bhab029, https://doi.org/10.1093/cercor/bhab029

CEO & UX Designer

UCI 2019 Opioid Hackathon | Irvine, CA

Designed a dual-interfaced website intended to pair individuals with opioid addictions with physicians and guide them through their addiction recovery. The website provided two options for recovery: a gradual reduction in opioid prescriptions and a wholistic approach. Either option would require the front-end user to report their progress daily and the back-end user (physician) would be able to view the progress and submit any feedback. The website also provided a community in which the front-end user could participate in outdoor events such as yoga with other front-end users.

- Website Link: https://marieltisby19985.wixsite.com/jaylmp-reentry
- Proposal:

https://docs.google.com/presentation/d/1WaynIVuoSzJvBd-8hM7lSR5-2FJAf9GvANvYRZb4fjs/edit?usp=sharing

Research Assistant June 2017 - Sept. 2018

UCI Hearing Lab | Irvine, CA

Studied spectral-temporal auditory integration with levels of uncertainty. Analyzed over 20 subject's behavioral data and modeled auditory integration over time. Designed data graphs and figures for published paper. Tasks included data collection, data analysis (using SPSS, MATLAB, and Python) and literature reviews.

Key Accomplishments:

- University of Irvine, California Summer Undergraduate Research Program Fellow (<u>Link to proposal</u>)
- Richards, V., Tisby, M., Suzuki-Gill, E., Shen, Y. (in press). Sub-optimal construction of an auditory profile from temporally distributed spectral information. *The Journal of the Acoustical Society of America*.

EDUCATION

University of California, Irvine | Bachelor of Science in Cognitive Science

- GPA: 3.8/4.0
- 2019 UCI Opioid Hackathon Winner; UCI Social Sciences Order of Merit; Chancellor's Award of Distinction; Cognitive Sciences Honors Student; Phi Beta Kappa Honor Society

Web Developer Bootcamp | Certification

Expected Dec. 2021

SKILLS

Python | MATLAB | Java | Linux Operating Systems | SPM | SPSS | JASP | Excel | BrainVoyager | DSI Studio | git | HTML | CSS | JavaScript |

LINKS

GitHub: https://github.com/mtisby

LinkedIn: https://www.linkedin.com/in/mariel-tisby-5a7a93bb/