Andrew N. Oabel

(858) 602-2562 aoabel@ucsd.edu

Education

San Diego, CA UC San Diego Expected Graduation: June 2024

- B.S. in Computer Science with Minor in Linguistics. GPA: 3.98/4.0
- **CS and Math Coursework:** Statistical NLP, Deep Learning for NLU, Intro to Computer Vision, Advanced Data Structures, Multivariable Calculus, Linear Algebra, Statistical Methods (4.0/4.0 for all)
- **Graduate Coursework:** Principles of AI: Probabilistic Reasoning and Learning (4.0/4.0)
- Languages and Tools: Python, Java, C++, C, VSCode, Huggingface, Pytorch, Pandas, Numpy, LaTeX

Research Experience

Undergraduate Researcher

UCSD CSE Department

June 2022 - Present

- Advisor: Dr. Mai ElSherief
- Used classical and transformer-based machine learning models to create classifiers for identifying risk factors related to
 problem gambling and burnout. Scraped and processed over 400,000 natural language posts from online communities
 on Reddit. Developed a codebook to annotate risk factors displayed by Reddit posts. Presented at the UC San Diego
 Summer Research Conference and UC LEADS Symposium.

Undergraduate Researcher

UCSB CSE Department

June 2023 - September 2023

- Advisor: Dr. Misha Sra
- Created a user interface using Django to explore human trust in pre-trained models. Helped formulate a custom questionnaire and survey for the user study. Presented at the UCSB Summer Undergraduate Research Colloquium.

Undergraduate Researcher

UCSD CSE Department

September 2021 - June 2022

- Advisors: Dr. Tzu-Mao Li and Dr. Ravi Ramamoorthi
- Worked in a team of undergraduates to explore the effects of regularization and hyperparameters on 3d scene reconstruction. Modified existing state of the art inverse rendering pipelines to control which regularization techniques are used. Presented at the end of year UC San Diego Undergraduate Research Symposium.

Undergraduate Researcher

UCSD CSE Department

January 2021 - June 2021

- Advisor: Shuyang Li
- Created a Bidirectional LSTM for fake news classification. Performed tokenization and stemming on over 44,000 fake and real articles and headlines. Replicated the results of a recent study using the Bi-LSTM.

Publications

- Andrew Oabel, Nazanin Sabri, Jenelle Truong, Vivian Dang, Samir Rashid, Artur Rodrigues, Marissa Lee, and Mai ElSherief (2023), "Detecting Risk Levels in Problem Gamblers Through Online Communities on Reddit," (preprint).
- Jenelle Truong, Nazanin Sabri, Vivian Dang, **Andrew Oabel**, Samir Rashid, Artur Rodrigues, Marissa Lee, and Mai ElSherief (2023), "Examining Mental Burnout Discourse Across Reddit Online Communities," (preprint).

Presentations and Posters

- ERSP National Conference, Virtual, September 2023. **Oabel, A**; Liu, M; Sazzad, N "Observing the Peaks and Troughs of Inverse Rendering" (poster). **Oabel, A** "Detecting Risk Levels in Problem Gamblers Through Online Communities on Reddit" (presentation).
- Summer Undergraduate Research Colloquium, Santa Barbara, CA, August 2023. **Oabel, A** "Reshaping Trust in Pre-Trained Model-Assisted Decision Making" (poster).
- Summer Scholar Presentation Session, Santa Barbara, CA, August 2023. **Oabel, A** "Reshaping Trust in Pre-Trained Model-Assisted Decision Making" (presentation).
- UC LEADS Conference, La Jolla, CA, April 2022. **Oabel, A** "Detecting Risk Levels in Problem Gamblers Through Online Communities on Reddit" (poster).
 - Received honorable mention (~top 15/75 presentations)
- Summer Research Conference, La Jolla, CA, August 2021. **Oabel, A** "Detecting Risk Levels in Problem Gamblers Through Online Communities on Reddit" (presentation).
- Undergraduate Research Symposium, La Jolla, CA, May 2021. **Oabel, A**; Liu, M; Sazzad, N "Observing the Peaks and Troughs of Inverse Rendering" (poster).

Honors and Awards

- Google CS Research and Mentorship Program (CSRMP) Scholar, Google (2022)
- UC LEADS Scholar, University of California (2022)
- Regents Scholar, UC San Diego (2020)
- Warren College Honors Society Member, UC San Diego (2020-Present)
- Provost Honors, UC San Diego (2020-Present)

Teaching and Mentorship

Undergraduate Tutor

UCSD CSE Department

September 2021 - Present

- Utilized visualizations and socratic questioning to explain concepts in one-on-one and group settings. Graded students' homework and assignments, gave constructive feedback, and recommended supplementary resources.
- Tutored Discrete Mathematics (Fall 2021), Intro to Programming I (Fall 2023), Intro to Programming II (Winter 2022), and Tutor Apprentice (Spring 2022, Fall 2022, Winter 2023)

Lead Peer Mentor

UCSD CSE PACE

September 2022 - Present

- Introduced advanced computer science topics such as interdisciplinary computing, machine learning, and AI ethics to a cohort of first year students as a part of the CSE Peer-led Academic Cohort Experiences (PACE) program. Created a safe space for a diverse group of students to comfortably share ideas and collaborate.
- Served as Lead Peer Mentor Fall 2022, Winter 2023, and Spring 2023.

Mentor

UCSD Scholars Society

October 2022 - Present

• Served as a mentor to first year Regents and Jacobs scholars navigating UCSD and the CSE Department. Held socials and other gatherings to discuss residential life, academic and career advice, and other various topics.

Outreach

- ERSP Enrichment Panel, CSE Department at UC San Diego (July 2023)
- Experienced Tutor Panel, CSE Department at UC San Diego (March 2022)
- CSE DEI Imposter Syndrome Panel, CSE Department at UC San Diego (May 2021)

Membership

- UC San Diego Scholars Society Academic Chair (2023-Present)
- UC San Diego Scholars Society Member (2020-Present)
- ACM @ UCSD Member (2020-Present)
- UCSD Computer Science and Engineering Diversity, Equity, and Inclusion Member (2021-Present)
- Kaibigang Pilipin@ Member (Filipino Culture Club) (2020-2021)

References

Dr. Mai ElSherief - melsherief@ucsd.edu

Assistant Teaching Professor, Computer Science and Engineering Department at UC San Diego

Relationship: Faculty Advisor

9500 Gilman Drive La Jolla, CA 92093

Dr. Mia Minnes - minnes@ucsd.edu

Associate Teaching Professor, Computer Science and Engineering Department at UC San Diego Relationship: Professor, Tutoring Course Instructor (Discrete Mathematics, Tutor Apprentice) 9500 Gilman Drive
La Jolla, CA 92093