9500 Gilman Drive
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Andrew N. Oabel

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Education

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

- B.S. in Computer Science with Minor in Linguistics. GPA: 3.97/4.0
- **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. Scraped and processed over 30,000 natural language posts from online communities on Reddit. Developed a codebook to annotate risk factors displayed by Reddit posts. Presented at UCSD Summer Research Conference and planning to publish as first author to ICWSM 2023.

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 UCSD Undergraduate Research Symposium.

Undergraduate Researcher	UCSD CSE Department	January 2021 - June 2021

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

Presentations and Posters

- 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)

Technical Projects

- **Idiom Detector and Translator** (2022). Utilized Hugging Face Transformers such as BERT and PEGASUS to detect English idioms and translate them to their literal meanings. Python, Huggingface, Pandas
- **Portal Video Game** (2019). Developed a 2d action puzzle platformer in Java. Used game design concepts to develop 7 levels complete with animation and music. Java, LibGDX

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, gave constructive feedback, and recommended supplementary resources.
- Tutored Discrete Mathematics (Fall 2021), Introduction to Programming II (Winter 2022), and Tutor Apprentice (Spring 2022 and Fall 2022)

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.

Mentor   **UCSD Scholars Society**   **October 2022 - Present**
- Served as a mentor to first year Regents and Jacobs scholars navigating UCSD and the CSE Department.

Outreach

- Experienced Tutor Panel, CSE Department at UC San Diego (March 2020)
- CSE DEI Imposter Syndrome Panel, CSE Department at UC San Diego (May 2020)

Membership

- 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
Assistant Teaching Professor, Computer Science and Engineering Department at UC San Diego
Relationship: Faculty Advisor
9500 Gilman Drive
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Dr. Mia Minnes
Associate Teaching Professor, Computer Science and Engineering Department at UC San Diego
Relationship: Professor, Tutoring Course Instructor (Discrete Mathematics, Tutor Apprentice)
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