AIDAN M. MOKALLA

linkedin.com/in/Aidan-Mokalla   AidanMokalla@gmail.com   +1 (612) 802-6955

UNDERGRADUATE EDUCATION   GPA: 3.7/4

Reed College, Portland, Oregon, USA,   *2025*
+ Spanish minor, sole member of graduating class with double majors **(Computer Science** and **Linguistics)**

Bryn Mawr College, Dushanbe, Tajikistan,   *2024*
+ Fellowship funded by the international non-profit *American Councils* to research Persian language varieties,

La Universidad de Carlos III and **Middlebury College**, Madrid, Spain,   *2023*
+ Spanish-language courses including International Law, Data Science, and Reinforcement Learning.

ACADEMIC PUBLICATION

Adversarial Robustness against Subliminal Learning Attacks, *with* Jannik Brinkmann,   *forthcoming*
+ Developing deep method of ablating obfuscated dangers in post-training data for large language models (LLMs),

Network Agnostic Consensus: Tight Bounds across Fault Models, *with* Erica Blum,   *TCC 2026*
+ Proved tight running-time bounds for all algorithms achieving network-agnostic Byzantine consensus,

Language-Agnostic Concept Spaces Found in Large Language Models, *thesis, with* Greg Anderson   *2025*
+ Designed, implemented, and evaluated novel architecture to interpret transformer-based LLMs by leveraging natural-language translation of ground-truth semantics. My approach learns convergent "concept spaces" over LLM activations in parallel, yielding more meaningful LLM interpretations than prior work.

Modulated Signal Filtering: Wouldn't it be Noise?, *thesis, with* Sameer ud Dowla Khan,   *2025*
+ Collected over 3,000 participant responses to investigate how listeners use unique cognitive strategies to parse spoken speech versus song lyrics using deep autoregressive analytic methods,
+ Demonstrated how we use contextually-differentiated mechanisms to filter noise from the linguistic signal by making significantly better predictions of how people interpret unclear speech within the *Noisy Channel Model,*

LEADERSHIP *&* EXPERIENCE

Linguistic Diversity Initiative, *Lead Volunteer Ambassador,*   *June 2023 – present*
+ Leading a team of seven translators, I compiled and published dictionaries of all scientific terminology used in Portland Public's 5th grade science curricula, translated into 6 languages, for households with low English proficiency, enabling more than 800 families in Portland to engage in their students' science educations so far,
+ Taught seminars to students and faculty about ongoing research on language use within the classroom and without,
+ Organize and lead twice-monthly events and meetings of over 50 volunteers,

Reed College Student Body, *Senator & Honor Councillor,*   *September 2021 – May 2025*
+ Peer-elected to serve in faculty committees including the college's *Committee on Academic Policies and Planning* and *Committee on Computer Policy and Planning,* disburse 6-figure Student Body Fund and other resources to college organizations and events, and interview and hire all student applicants for on-campus roles,
+ Mediated and resolved conflicts between students, professors, and other members of the college community,

STEM Outreach Program, *Elementary Science Teacher,*   *August 2021 – May 2025*
+ Taught weekly 5th grade physical and environmental science classes at Earl Boyles Elementary, Portland Public,

Stoel Rives, LLC, *Intern Practise Assistant,*   *May – August 2022*
+ Implemented compliant automation of docketing, court appearances, and other events from firm-wide databases,
+ Maintained communication on behalf of attorneys while drafting and proofreading attorney correspondences.

SKILLS *&* ACCOLADES

Computational: Python, various data and NLP pipelines, PyTorch, NumPy, JS, Next.js, C++, PHP, SQL, Swift,
Languages: Fluent Spanish, English, intermediate Farsi, Tajik, French, basic Portuguese, Dari, Chinese (Mandarin),
Certifications: Federally eligible for non-competitive civil service, licensed in Conflict Mediation & Resolution, CPR,
Awards: Presidential Commendation for Academic Excellence, Reed College Music Scholarship, National Diversity in STEM Grant, Department of State Critical Languages Scholarship.