

Research Intern - Machine Learning

Laboratory for Computer-Human Intelligence, Division of Engineering,

NYU Abu Dhabi

The Laboratory for Computer-Human Intelligence (CHI-lab, <https://www.x-labs.xyz>) in the Division of Engineering, New York University Abu Dhabi, is seeking a highly motivated research intern to advance cutting-edge research in machine learning (ML). Our lab explores the intersection of artificial intelligence, and human-computer interaction, striving to create technologies that amplify human potential.

The successful candidate will engage in innovative research projects in ML, focusing on developing novel ML algorithms, enhancing human-AI collaboration, and exploring systems tailored to dynamic, human-centered environments. They may also work with diverse signal modalities, including vision, speech, images, and physiological signals.

Preferred Experience:

The lab highly values candidates with one or more of the following experiences:

- **Human-Centered Applications:** Familiarity applying ML in areas like healthcare, education, neuro-robotics, and/or assistive technologies. Prior experience in physiological signal processing (e.g., EMG, EEG, ECG) is an advantage. Familiarity with HCI principles and frameworks, in particular, experience conducting usability studies and designing user-centric AI systems.
- **Assistive / Collaborative Robotics:** Interest in developing robotic systems for rehabilitation, assistive technology, or neuro-prosthetics, leveraging machine learning to improve precision and adaptability in user interactions. Knowledge of deploying robots in shared workspaces, focusing on safety, cooperation, and efficiency in human-robot teams.
- **Multi-Modal ML:** Experience in working with diverse data types, such as vision, speech, images, and physiological signals. Experience integrating multiple modalities to build robust AI systems is an advantage
- **Interdisciplinary Applications:** Leveraging LLM / VLMs for interdisciplinary problems, such as: AI-driven scientific discovery, automating hypothesis generation in finance / natural sciences / physical sciences, enhancing collaborative workflows in complex organizational settings.

Qualifications:

- Applicants must be pursuing a BS in Computer Science or related field.
- Experience in one or more ML domains, such as deep learning, vision processing, or human-centered ML.
- Proficiency in programming languages (e.g., Python) and ML frameworks (e.g., TensorFlow,



PyTorch), with evidence in the form of public (Github) repository.

- Excellent abilities in communication, teamwork, and mentorship.
- Strong publication record as a lead author in a top-tier conference (e.g., NeurIPS, ICML, CHI, CVPR) would be ideal. Evidence of a lead author workshop paper may also be considered.

For consideration, applicants need to submit a cover letter, curriculum vitae with full publication list, statement of research interest and 1 letter of recommendation, all in PDF format. If you have any questions, please email Prof. Tuka Alhanai at: tuka.alhanai@nyu.edu.

The internship opportunity is competitive. Applications will be accepted during a short timeframe during Spring and Fall terms. Shortlisted candidates will be notified within a month of the application deadline.

About NYUAD:

NYU Abu Dhabi is a degree-granting research university with a fully integrated liberal arts and science undergraduate program in the Arts, Sciences, Social Sciences, Humanities, and Engineering. NYU Abu Dhabi, NYU New York, and NYU Shanghai, form the backbone of NYU's global network university, an interconnected network of portal campuses and academic centers across six continents that enable seamless international mobility of students and faculty in their pursuit of academic and scholarly activity. This global university represents a transformative shift in higher education, one in which the intellectual and creative endeavors of academia are shaped and examined through an international and multicultural perspective. As a major intellectual hub at the crossroads of the Arab world, NYUAD serves as a center for scholarly thought, advanced research, knowledge creation, and sharing, through its academic, research, and creative activities.

EOE/AA/Minorities/Females/Vet/Disabled/Sexual Orientation/Gender Identity Employer

UAE Nationals are encouraged to apply