

TRA NGO

☎ 469-733-0999 ✉ tra.ngo@utsouthwestern.edu 🌐 tra-ngo 🎧 thngo 📍 Dallas, Texas 75235

- Ph.D. candidate with expertise in computational image analysis and tool-building for live cell imaging. • 4+ years of programming experience. • Strong team player, passionate about continuous learning, effective communication, and working in diverse, multidisciplinary environments. • Seeking data science/ML experience in industry.

TECHNICAL EXPERTISE

• Python • R • MATLAB • Git • Linux • Adobe Illustrator • Particle tracking

WORK & LEADERSHIP EXPERIENCES

Graduate Research Scientist

May 2019 - Present

Jaqaman Lab. Biophysics Dept., UT Southwestern Medical Center. Dallas, Texas

- Build a computational super-resolution image analysis pipeline to study the 🔗 [knowledge gap in biology](#).
- Solve analytical problems using rigorous and quantitative approaches.
- Publish in 🔗 [peer-reviewed journal](#).
- Present research in 🔗 [conferences](#) and 🔗 [society meetings](#).

Teaching Assistant

The University of Texas Southwestern Medical Center. Nanocourses.

2019-2023

- Assisted Ph.D. candidates and postdoctoral researchers with Computational Image Analysis problems.
- Lectured undergraduate research fellows in Basic and Advanced Image Processing and Analysis.

The University of Texas at Dallas. Part-time.

Jan 2018 - May 2018

- Assisted undergraduate courses in Mathematical Analysis I and Applied Calculus.

Analyst

PreScouter, Inc. Remote. Part-time.

Sep 2021 - Nov 2021; Apr 2022 - Jun 2022

- Translated global market research on companies in the steel industry into presentations for industry clients.

Mitogen Consulting Group. Remote. Part-time.

Feb 2021 - Aug 2021

Student Organization Leader

Sep 2020 - May 2022

Student Emerging Academy of Leaders. UT Southwestern Medical Center. Dallas, Texas

- Facilitated eight 1.5-hour leadership workshops with invited speakers for 15-20 attendees per session.

PROJECTS

Computational pipeline building

Jaqaman Lab, UT Southwestern (May 2019 - Present)

- Built a 🔗 [computational analysis pipeline](#) in MATLAB for Single Molecule Imaging and Fluorescent Speckle Microscopy movies of live single cell.
- Applied particle detection and tracking algorithms, machine learning methods, mutual information, and information criterion, to study the gap in knowledge of the dynamic organization of membrane proteins and the actin cortex.

Mutation landscape analysis

Futreal Lab, MD Anderson Cancer Center (May 2014 - Aug 2014)

- Analyzed in R the mutation landscape of a cancer patient pre- and post-targeted therapy with a novel drug.

EDUCATION

The University of Texas Southwestern Medical Center

Aug 2018 - Dec 2024 (Expected)

Ph.D. Candidate in Genetics, Development and Disease (*Advisor: Khuloud Jaqaman*)

Dallas, Texas

- Computational and Systems Biology Graduate Track
- Mechanisms of Disease and Translational Science Graduate Track

The University of Texas at Dallas

Aug 2013 - May 2018

B.S. Mathematics and Molecular Biology (*GPA: 3.847*)

Dallas, Texas

- Ray Allum Math and Physics Scholarship • Silver Medal, 2016 global University Physics Competition
- Academic Excellence Scholarship • Collegium V Honors Program • Cum Laude • Math Cohort

OTHER

I spearheaded training of undergraduate researchers in scientific reading via the Green Fellow Journal Club.
I won awards in consulting and global health case competitions in 2021.
I enjoy fencing, swing dancing, 🔗 [making video games](#), and rock climbing.