MOHAMMAD SOHAIB

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SUMMARY

- Interdisciplinary researcher with skills and experience in neuroscience, and electrical engineering.
- Skilled at integrating different technologies to develop innovative and practical solutions.
- Familiar with AI concepts and their applications in various domains.
- Demonstrated ability to tackle complex challenges and find effective solutions.
- Strong team player with a collaborative mindset, able to work effectively in interdisciplinary environments.

TECHNICAL SKILLS

- **Machine Learning:** Implementing Deep Neural Nets and ML models.
- **Data analysis:** Analysis of electrophysiological data and NEURON modelling.
- **Microscopy/Imaging:** Confocal microscopy, Calcium Imaging.
- **In-Vitro Patch-Clamp Technique:** Whole cell recordings, optogenetic stimulations.
- **Brain Surgeries:** Viral injections in mice

RESEARCH EXPERIENCE

Structural Neurobiology group, PI: Dr. Adrian Wanner   **PSI, Villigen**
Doctoral researcher   *May 2023 to present*
- Designing and developing virtual reality setup for mice.
- Thesis research on mapping Alzheimer's disease pathology.

Cortical Computation lab, PI: Prof. Jackie Schiller   **Technion, Haifa**
Research student   *March 2020 to September 2022*
- Led a project on memory mechanisms in dendrites of piriform cortex in rodents.
- Responsible for performing experiments, electrophysiology and analysis.

Rapid Eye Movement Sleep Laboratory, PI: Prof. B.N Mallick   **Jawaharlal Nehru University, New Delhi**
Research Intern   *July 2018 to April 2019*
- Involved in study of morphological changes in neurons using computational tools.
- Received token of recogntion for presenting a poster on Exploratory analysis of neuromorphometric data.

EDUCATION

PhD in Neuroscience   **ETH, Zurich**
GPA:NA   *May 2023 to present*
- Working on a project to probe memory loss in Alzheimer's disease.

MSc in Neuroscience   **Technion, Haifa**
GPA:87.9   *March 2020 to September 2022*
- Worked on a project to probe memory mechanisms in Smell Cortex.
- Represented a startup in Technion's entrepreneurship program.

BTech in Electrical Engineering   **Jamia Millia Islamia, New Delhi**
GPA:90   *July 2014 to August 2018*
- Learnt signal and systems, circuit analysis, engineering math, control systems among core electrical courses.
- Led a team of university students to conduct a Tedx event.

FELLOWSHIPS

- 2020-2022: Graduate Scholarship, Technion
- 2019: Junior Research Fellow, AIIMS
- 2016: Merit Scholarship (MOMA), JMI

MANAGERIAL AND LEADERSHIP EXPERIENCE

- 2017: Co-Organiser TEDxJMI. Led a pan-university team of 70+ individuals.
- 2015: Co-Founder SCONJ (Student community). Established connection with 400+ students within one year.

OTHER SKILLS

Software   Igor, Microsoft Word, Excel, and PowerPoint, Photoshop, Autodesk Inventor
Languages   English: professional proficiency. Urdu: native. Hindi: conversational. Arabic: Basic

HOBBIES

- Advocate and felicitate education for all.
- Interested in philosophy and long drives.