# MOHAMMAD SOHAIB

Technion, Israel Institute of Technology, Haifa Israel

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#### **SUMMARY**

- Interdisciplinary research student with skills and experience in neuroscience, and electrical engineering.
- Always willing to learn new skills and tools to expand my intellectual horizon.
- Deep interests in neurological diseases and computational ability of dendrites.
- Self-motivated, problem-solving and hold a collaborative outlook.

#### **TECHNICAL SKILLS**

- Animal Handling: Mouse handling, Brain Slicing
- Viral Injections: Stereotaxic injections in rodents.
- Microscopy/Imaging: Confocal microscopy, Calcium Imaging and analysis
- In-Vitro Patch-Clamp Technique: Whole cell recordings, Paired/ Unpaired dendritic focal stimulation, optogenetic stimulations
- Machine Learning: Implementing DNN and ML models.
- Python: Numpy, Scipy, Matplotlib.

#### RESEARCH EXPERIENCE

 Cortical Computation lab, PI: Prof. Jackie Schiller Research master's student Technion, Haifa

March 2020 to June 2022

 Rapid Eye Movement Sleep Laboratory, PI: Prof. B.N Mallick Research Intern Jawaharlal Nehru University, New Delhi

July 2018 to April 2019

#### **EDUCATION**

MSc in Medicine Technion. Haifa

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March 2020 to June 2022

- Worked on a project to probe plasticity mechanisms in Piriform Cortex.
- Expertise in Confocal microscopy, patch clamp technique, optogenetics.
- Courses in neurophysiology, neuroanatomy, biophysics

#### **BTech in Electrical Engineering**

Jamia Millia Islamia, New Delhi

GPA:90

GPA:87.9

July 2014 to August 2018

- Learnt signal and systems, circuit analysis, engineering math, control systems among core electrical courses.
- Developed an Online Air Pollution Monitoring system as the final year project.
- Completed a summer training at Power Grid, New Delhi and learned the various aspects of Power system design.
- 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

## **PRESENTATIONS**

- 2022: Kumar A; Sohaib M; Schiller J. Low-frequency plasticity of olfactory bulb inputs mediated by Kv4.2 channels in rodent piriform cortex, poster presentation at FENS; July 2022; Paris, France
- 2022: Invited talk at Ernst Strüngmann Institute hosted by Hermann Cuntz, Peter Jedelicka.
- 2019: Poster presentation on Exploratory analysis of neuromorphometric data.

#### MANAGERIAL EXPERIENCE AND CERTIFICATIONS

- 2018: Graduate Aptitude Test in Engineering, Top 2 percentile
- 2017: Co-Organiser TEDxJMI. Led a pan-university team of 100+ individuals.
- 2015: Co-Founder SCONJ (Student community). Established connection with 400+ students within one year.
- 2014: JEE Mains, Top 5 percent

#### **OTHER SKILLS**

**Software** Igor, Photoshop, Illustrator, Microsoft Word, Excel, and PowerPoint **Languages** English: professional proficiency. Urdu: native. Hindi: conversational.

## **HOBBIES**

- Advocate and Felicitate Education for All.
- Interested in philosophy and long drives.