Harsh Himanshu Khilawala

(He/Him/His)
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EDUCATION

Pace University, Seidenberg School of Computer Science and Information Systems — New York, NY
Master of Science (MS) in Computer Science | **GPA: 3.74/4.0** — May 2025

Charotar University of Science and Technology (CHARUSAT) — Anand, Gujarat
Bachelor of Technology (B.Tech) in Computer Science and Engineering | **GPA: 8.9/10** — May 2023

RELEVANT COURSEWORK

Engineering Mathematics (I & II) | Data Structures & Algorithms | Design & Analysis of Algorithms | Database Management Systems | Artificial Intelligence | Machine Learning | Data Science & Analytics | Image Processing and Computer Vision

PROFESSIONAL EXPERIENCE

NeuroPSI, Paris Saclay Institute of Neuroscience – CNRS (French National Center for Scientific Research) — Paris-Saclay, France
Student Intern — May 2022 – July 2022

- Improved the code quality and robustness of PyNN, a Python package designed for simulating spiking neuronal network models. Conducted a comprehensive review of the PyNN codebase, identifying areas for enhancement.
- Contributed to enhancing the documentation of PyNN for the broader scientific community, to make PyNN more accessible to researchers worldwide.

University of Tokyo – Earthquake Research Institute (ERI) — Tokyo, Japan
Research Intern — October 2021 – March 2022

- Developed a method with MATLAB by using Trimmed Dimensity Ratio Estimation algorithm to detect anomalies in the Global Navigation Satellite System time series data with **360,000+** data values associated with ground deformation due to geological phenomena such as slow earthquakes, volcanism, or water-level changes.

Google Summer of Code – International Neuroinformatic Coordinating Facility (INCF) — Surat, India
Student Developer — May 2021 – August 2021

- Developed Python script to generate MockData Class using a template to generate **1000+** data values due to the scarcity of real-world data .
- Developed a method to quantify the quality of CerebUnit's Validation tests via metrics such as Sensitivity, Specificity, Positive Predictive Value, Negative Predictive Value, and Level of Significance with 95% accuracy in predicting values.

TECHNICAL SKILLS

Programming Languages: C, C++, Java, Python, JavaScript, MATLAB, HTML, CSS, SQL, NoSQL, Markdown
Database Management: PostgreSQL, MySQL, Oracle, MongoDB, AtlasDB
Libraries: Sci-kit Learn, Tensorflow, Keras, Numpy, Pandas, seaborn, SciPy, Matplotlib
Machine Learning Algorithms: Linear Regression, Logistic Regression, Decision Tree, Support Vector Machine, KNN, K-means, Random Forest, Naïve Bayes

ACADEMIC PROJECTS / PERSONAL PROJECTS

Projects - Link — July 2019 – Present

- Developed a portfolio of multiple projects tackling real-world problems and fun learning.

AWARDS

Charotar University of Science and Technology - Certificate of Merit — December 2019

- Secured **3rd Rank** out of 160 students at Institute level.

Ignite – Grand Prize Winner — January 2020

- Won Coding Competition among undergraduate students at state level.

VOLUNTEERING

Oppia – Automated QA Team (Open Source) — October 2020 – May 2021

- Fixed major bugs and flakes causing end-to-end tests to fail to improve code coverage and enhance efficiency.
- Performed monthly release testing to deliver error-free code.