TANU RANA

SKILLS

Project Management | Crypto Twitter Technical Writing | Leadership | Problem Solving | Object Oriented Programming | Python | SQL | React | Node.js | ML | Automation | Selenium/Squish | User Research | Scientific Computing | Systems Thinking.

EXPERIENCE

SENIOR QUALITY ASSURANCE SCIENTIST-I

Schrödinger India Pvt Ltd | Dec 2021-Present

- QA Professional with 6+ years of work experience in project management, software development and test automation for biochemistry based scientific web & PyQt applications.
- QA Team Lead for 7 diverse international product teams of scientists, engineers, UI/UX designers based across US/Europe for applications based on Quantum Chemistry. Responsible for stakeholder collaboration and steering product development roadmap.
- Achieved 80%+ automation coverage (from scratch) for detecting software anomalies, relinquished customer bug reports from 39% to 8%. Commended by Director of Scientific Infrastructure.
- Devised testing strategies to track, validate & improve performance/viability of challenging scientific applications on a quarterly software release cycle.
- Recruited, trained, led a cross-cultural team of 12 associates, spanning 3 continents. Drove multiple independent projects, managed deliverables, advised on improvements.

SENIOR QA SCIENTIST-I

D E Shaw India Pvt Ltd | March 2019-Dec 2021

- Drove and coordinated product development, maintenance and automation for various computational chemistry software packages.
- Analyzed, validated, improved, benchmarked new scientific functionalities.
- Architected proof of concepts, developed end-to-end scientific workflows in python.
- Developed data aggregation, wrangling, reporting tools for large scale computations for collaborative multi-user applications.
- Developed automation frameworks. Benchmarked & analyzed cutting edge scientific functionalities. Maintained scientific infrastructure of over 5K utility tests.

SENIOR/MEMBER TECHNICAL

D E Shaw India Pvt Ltd | Aug 2016-Feb 2019

- Responsible for tracking, testing, analyzing scientific GUIs in agile environments across multiple platforms.
- Led cross-pollination initiatives. Developed python utilities for custom user workflows in collaboration with scientific infrastructure and support teams. Led to major efficiency gains.
- Trained in UI/UX. Analyzed usability aspects of applications, improved experience, provided feedbacks on technology requirements and use-case scenarios and documented new-features.
- Participated in code reviews, code cleanups and Python3 porting.

GRADUATE TRAINEE

Indian Institute of Technology (IIT) Delhi | Sep-2015

- Trained in High Performance Scientific Computing, Drug Design & Discovery, Protein Folding, Genome Analysis at the Supercomputing Facility for Bioinformatics and Computational Biology.

GRADUATE RESEARCH INTERN

Indian Institute of Science Education & Research (IISER) Bhopal | June 2015- July 2015

- Conducted research with Computational Biophysics & Soft Matter group.

ACHIEVEMENTS

- Youngest to be promoted to Senior Scientist within a span of only 2.5 years.
- Felicitated by B. Goddard Award for exemplary contributions to Material Science team (awarded to only one employee per year)
- Won "Most Innovative Talk" award among 22 teams (audience of 700) in annual innovation show-case conference (2019).
- Ranked 1st in graduate school's national entrance exam amongst thousands of applicants; Graduated top 2% of the class; Awarded 'Best Research Dissertation' for inter-disciplinary research.

EDUCATION

M.Sc Applied Chemistry (Minor: Computer Science)

National Institute of Technology (NIT) Jalandhar | 2014-16 | CGPA-8.1/10

B.Sc (Hons) Chemistry
University of Delhi | 2010-13 | CGPA-7.7/10

CERTIFICATES

- Decentralised Finance Specialisation (Duke University) | Introduction to Blockchain & Cryptocurrencies (Unit Network) | Blockchain & Money (MIT OCW)
- Machine Learning, Neural Networks & Deep Learning, Python Data Science Tool Box, SQL, Selenium, Node.js, React.
- Business Foundations, Financial Markets, Business Model Innovation.

VOLUNTEER EXPERIENCES

SHEFI SCHOLAR

SheFi (Education program for onboarding women into the crypto space) | Sep - Dec 2022

- Selected to be a SheFi scholar, only 20 were selected amongst a global cohort of 600+ crypto curious women.
- Deep dived into the crypto rabbit hole, authored a newsletter to break down complex crypto concepts into bite sized knowledge nuggets. Led global study groups and networking events.

MENTEE (PART-TIME)

she256 | June - Dec 2021

- Mentorship program for advancing female blockchain literacy. Learned blockchain fundamentals and strategies for defining foundations of a novel idea.
- Paired with a silicon valley start-up founder to navigate the blockchain ecosystem and co-create business models for sustainable use-cases.
- Navigated the entrepreneurial journey, from identifying a problem, drafting business model to developing strategies for market research, customer discovery, product development and scale.