Arya Suneesh

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⚙ TECHNICAL SKILLS

Languages: Python, JavaScript, C, C++, Java, Shell, MySQL
Developer Tools: VS Code, Cursor, Android Studio, Vercel, Netlify
Technologies: Linux, Git, Pandas, Numpy, Matplotlib, Streamlit, React, scikit-learn, Flask, Django, Docker
Frameworks: PyTorch, TensorFlow, LangChain, Pydantic, FastAPI, LlamaIndex, Hugging Face Hub
Soft Skills: Adaptability, Critical Thinking, Leadership, Self-Motivation, Perseverance, Communication

🎓 EDUCATION

Indian Institute of Information Technology, Kottayam	**December 2021 – May 2025**
B.Tech. Computer Science and Engineering — **CGPA - 9.64/10.00**	*Kerala, India*
Our Own English High School, Sharjah	**April 2019 – July 2021**
Class XII (CBSE) **Performance - 98.2%**	Sharjah, UAE

🏆 ACHIEVEMENTS

- Selected as **one of the 16** participants of the highly competitive **MCQST Summer Bachelor Program** 2025 organized by Munich Center for Quantum Science and Technology
- Attained **3rd rank on Task 7 : Multilingual & Crosslingual Fact-Checked Claim Retrieval** of **SemEval 2025** and **3rd Rank on Task 2 : Claims Extraction & Normalization of CheckThat! Lab, CLEF 2025** as a member of **TIFIN India**
- Earned the Advanced badge on completion of the **IBM Quantum Challenge 2024**
- Completed **Womanium Quantum+AI Program 2024** with a scholarship, completed courses include : **Pennylane QML, QBronze, QNickel, Quantum Hardware, Artificial Intelligence**
- Awarded the **DAAD-WISE** Scholarship (2024): Selected as one of 250 students for the prestigious scholarship, enabling a research internship at **UdK Berlin + Einstein Center Digital Future** (ECDF)
- Received **100% scholarship** upon being selected as **one of the 250 scholars** of Cohort 4 of **Women Engineer Program**, conducted by **NSE Talentsprint** and supported by **Google**.

💼 EXPERIENCE

TIFIN RM ↗
NLP Engineer

May 2025 – Present
Bangalore, Karnataka, India

- Engineered a semantic cache upgrade by migrating to MPNet embeddings, achieving latency reduction of over 2.5 secs
- Systematized resolution of production bugs, addressing critical issues in context handling, response generation, and intermittent query failures to enhance system stability.
- Expanded system capabilities to process new financial query types (SIP/STP/SWP) and optimized response generator through prompt engineering.
- Directed data integrity initiatives, including data anonymization and misclassification correction, and pioneered research into novel LLM evaluation techniques to bolster model reliability.

Walther-Meißner-Institut ↗
Student Researcher

July 2025 – August 2025
Munich, Bavaria, Germany

- Developed shot-based simulation framework for realistic quantum measurements, implementing post-selection techniques to enforce gauge symmetry constraints and prepared deployment on 17-qubit superconducting chip
- Analyzed optimization landscapes under varying shot noise conditions, demonstrating how measurement statistics affect VQE performance and convergence in practical quantum devices
- Collaborated with international research team of 6 scientists on quantum algorithm development, contributing to experimental quantum physics research at a world-class quantum computing facility

TIFIN RM ↗
AI Research Intern

January 2025 – April 2025
Bangalore, Karnataka, India

- Led development of semantic caching system for RM's client diagnostics module, reducing query latency improvement of 60-70& and implementing cache optimization across 57 distinct queries
- Optimized response generation and token usage in LLM agents, establishing data filtering protocols and streamlining portfolio data processing
- Spearheaded latency optimization initiatives for client diagnostics module, addressing jq-command mismatches to enhance performance across advisor accounts with over 500 clients

MyFi by TIFIN ↗
AI Research Intern

October 2024 – December 2024
Bangalore, Karnataka, India

- Conducted in-depth research on state-of-the-art models for conversational AI, evaluating their performance and applicability to MyFi's mobile application.
- Contributed to the multilingual expansion of the MyFi application by integrating Indic languages.
- Enhanced support for colloquial conversational tones to improve user engagement and accessibility.

Universität der Künste Berlin/ECDF Berlin ↗
Research Intern (DAAD-WISE Scholar)

May 2024 – July 2024
Berlin, Germany

- Collaborated with Prof. Dr. Daniel D. Hromada (Juniorprofessor for Digital Education at Einstein Center Digital Future) on the 'Reading Primer' project in a team of six.
- Focused on developing and programming speech recognition models for the device's learning (HMPL) modules.
- Engineered prototype 'Fibel 4', enhancing both hardware and software capabilities.
- Gained proficiency in and demonstrated the use of udk.ai's personalized NLP models.

📄 RESEARCH PUBLICATIONS

- **QCNN-MFND:** A Novel Quantum CNN Framework for Multimodal Fake News Detection in Social Media
  Arya Suneesh, Balasubramanian P
  Accepted in Proceedings of Quantum Natural Language Processing and Artificial Intelligence (QNLP-AI 2025), Withdrawn; Accepted at IEEE Quantum Artificial Intelligence (IEEE QAI 2025)
- **TIFIN India at SemEval-2025:** Harnessing Translation to Overcome Multilingual IR Challenges in Fact-Checked Claim Retrieval
  Prasanna Devadiga, **Arya Suneesh**, Pawan Kumar Rajpoot, Bharatdeep Hazarika and Aditya U. Baliga
  Proceedings of the 19th International Workshop on Semantic Evaluation (SemEval 2025), Vienna, Austria, July 2025
- **TIFIN at CheckThat! 2025:** Reasoning-Guided Claim Normalization for Noisy Multilingual Social Media Posts
  Manan Sharma, **Arya Suneesh**, Manish Jain, Pawan Kumar Rajpoot, Prasanna Devadiga, and 5 more authors
  Accepted for Oral Presentation at the Conference and Labs of the Evaluation Forum (CLEF 2025), Barcelona, Spain, September 2025
- **Multilingual Conversational AI for Financial Assistance:** Bridging Language Barriers in Indian FinTech
  Bharatdeep Hazarika, **Arya Suneesh**, Prasanna Devadiga, Pawan Kumar Rajpoot, Anshuman B Suresh, Ahmed Ifthaquar Hussain
  Accepted for Poster Presentation at the FinAI Workshop of Conference on Information and Knowledge Management (CIKM) 2025

★ EXTRACURRICULAR

Community Lead, ML Industry 🔗   June 2025 - Present
Cohere Labs Open Science Community
  * Spearheaded the 'ML Industry' program to bridge the gap between academic research and industrial application in frontier ML.
  * Organized a series of talks, workshops, and panels with leading researchers to equip early-career professionals for success in industrial ML research.

Artificial Intelligence and Data Science Lead   October 2023 - September 2024
Beta Labs: Technical Club, IIIT Kottayam
  * Leading and supervising a team of AI and Data Science enthusiasts in executing various projects and initiatives.

Sub Technical Lead   September 2022 - June 2023
Google Developer Student Club, IIIT Kottayam
  * Organized workshops, seminars and hackathons for the student community at IIIT Kottayam.

📓 COURSES AND CERTIFICATIONS

- AWS ML Engineer Nanodegree Program 🔗
- AWS Machine Learning Foundations 2022 🔗
- AI Planet's 5 Week Data Science Bootcamp 🔗
- Introduction to Python Basics for Data Science 🔗
- Google Cloud Career Practitioners Pathway 🔗
- IBM Quantum Challenge 2024 🔗
- Goldman Sachs Engineering Virtual Program 🔗
- QxQ's Introduction to Quantum Computing🔗
- 2023 IEEE SPS Seasonal School on Quantum Computing and Machine Learning🔗