



# Nishanka Das

B.Sc.(Hons) in Computer Science  
Ramakrishna Mission Vivekananda Centenary College  
linkedin.com/in/nishanka-das  
Khamargachi, Hooghly, West Bengal, India, PIN - 712515

+91-9432191900  
nishanka.das.rkmvcc@gmail.com  
nishanka2004@gmail.com  
Github | Website

## EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Sc (Hons.)	Ramakrishna Mission Vivekananda Centenary College	8.9 (Current)	2022-Present
Higher Secondary	WBBHSC Board	76.8%	2022
Secondary	WBBSE Board	89.7%	2020

## EXPERIENCE

- **A.K Choudhury School Of Information Technology, University of Calcutta** *Oct 2023 - Present*  
*Research Intern supervised by Prof. (Dr.) Amlan Chakrabarti, Director AKCSIT* *Kolkata*
  - Currently learning CUDA Quantum for circuit implementation for various algorithms and machine learning algorithms
  - Comparing Classical Algorithms and Quantum Algorithms for optimized results with hybrid algorithms
- **Buddhanka Institute** *April. 2024 - Feb. 2025*  
*Volunteer Faculty of Computer Science & Application* *Kolkata*
  - Teaching Arduino based projects, MS EXCEL, Word, Power Point, HTML for class VI to X
  - Courses taught to class XI are Digital Logic, Python, Networking, Data Structure and Algorithm, Advanced Excel as per WBBHSC prescribed syllabus.
  - Designed and developed an institutional website with only front-end as prescribed by the organization.

## PROJECTS

- **Remote Sensing Imagery Classification using Hybrid Quantum Machine Learning** *Mar. 2024 - Present*  
*AKCSIT, University of Calcutta, Kolkata supervised by Prof. (Dr.) Amlan Chakrabarti*
  - Classification of water body from Multi-band Remote Sensing Imagery
  - Comparing Classical Support Vector Machine and Quantum Support Vector Classifier
- **CUDA Q to Qiskit conversion library for single Qubit circuits** *Feb. 2025 - Apr. 2025*  
*AKCSIT, University of Calcutta, Kolkata supervised by Prof. (Dr.) Amlan Chakrabarti*
  - For easier understanding of the difference of GPU simulation and real life Quantum computers
  - All the single qubit gates are covered (H,T,Rx,Ry,Rz,I,T,S)
- **Classical SVM and Hybrid QSVM Paradigms for Enhanced Credit Card Fraud Detection** *Oct. 2024 - Dec. 2024*  
*AKCSIT, University of Calcutta, Kolkata supervised by Prof. (Dr.) Amlan Chakrabarti* *Report*
  - Developed and implemented a comparative study of Classical Support Vector Machines (SVM) and Hybrid Quantum Machine Learning algorithms for detecting credit card fraud.
  - Designed and optimized a Quantum Support Vector Machine (QSVM) using 5-qubit angle encoding and advanced quantum kernel methods, showcasing superior performance in analyzing non-linear patterns within financial datasets.
- **Psychoinformatics with R** *June. 2022 - Jan. 2023*  
*RKMVCC Rahara supervised by Prof. Joydeep Kumar Dam* *Drive*
  - Analyzed the psychology of various people by taking survey and plotted the co-relation data using R programming language.
  - Used packages Psych, Corr plot

## SKILLS

- **Programming:** Python, C, C++, Java, R
- **Operating Systems:** Windows 11, Linux(Ubuntu, Mint)
- **Non Technical:** Presentation, Linear Algebra, Graph Theory, Discrete Mathematics, LaTeX, Figma
- **Used Packages:** igrph(R), psych(R), ggplot(R), NumPy(Py), Matplotlib(Py), sklearn(Py), Pandas(Py), PyTorch(Py)
- **Quantum Programming:** Qiskit, CUDA Quantum

## KEY COURSES TAKEN

---

- **Mathematics:** Linear Algebra, Basic Calculus, Discrete Maths, Abstract Algebra, Graph Theory
- **Computer Science:** C Programming , C++ Programming , Java Programming , Computer Networks, Operating System, Data Structures and Algo, Database Management System, Software Engineering, Theory of Computation, ML, AI, Numerical Analysis
- **Quantum Computing:**
  - Basics of Quantum Information, IBM Quantum Education
  - Fundamentals of quantum algorithms, IBM Quantum Education

## CERTIFICATES

---

- **Quantum Computing: Circuits, Algorithm and Machine Learning,**  
Workshop Organized by National Institute of Technology Rourkella *Jan. 2025*
- **Theory of Computation (NPTEL),**  
Elite Certificate (65%) in Theory of Computation taught by Prof. Raghunath Tewari, IIT Kanpur *Oct. 2024*
- **Workshop on Introduction to Data Science and Machine Learning,**  
Attended “Workshop on Introduction to Data Science and Machine Learning” organized by the Department of Computer Science, RKMVCC, Rahara. Taught by Madhusudan Thakur, AI Researcher, American Express *Aug. 2024*
- **International Symposium on Advances in Informatics & Computing,**  
Participated in International Symposium organized by Department of Computer Science, RKMVCC, Rahara. Focused on Machine Learning, Image Processing and Confidence Learning *Jan. 2024*

## POSITIONS OF RESPONSIBILITY

---

- **Volunteer at 27th ICPR 2024,**  
International Conference on Pattern Recognition, Inida *Dec. 2024*
  - Designed keynote speakers’ name plates
  - Volunteer at registration desk of ICPR
- **Nirdesh Question Setter and Designer,**  
Nirdesh (Inter College Tech Fest), RKMVC College, Rahara *April. 2024 - Sept. 2024*
  - Designed all the documents (Brochure, Hall Ticket, Schedule, Banner)
  - Prelims & Finals Question setter of Rahasyabhedhi (Mystery Solving) Competition
- **Neuroverse Question Setter and Designer,**  
Neuroverse (Intra College Tech Fest), RKMVC College, Rahara *Feb. 2024 - Mar. 2024*
  - Designed all the documents (Brochure, Hall Ticket, Schedule, Banner)
  - Prelims Question setter of Codecraft(Coding competition) and prelims and final round question setter of Gray Matter (Mystery Solving Competition)

## ACHIEVEMENTS

---

- **Runner Up,** Poster presentation competition, Brainware University, Barasat *May. 2024*
- **Runner Up,** Poster presentation competition, GNIT, Sodhpur *Feb. 2024*
- **2nd Runner Up,** Secured **3rd rank** in intra college science quiz competition *Mar. 2024*

## EXTRACURRICULARS

---

- **Student Volunteer,** National Service Scheme

## REFERENCES

---

- **Prof. Amlan Chakrabarti,** Director, AKCSIT, University of Calcutta, India  
Mail - acakcs@caluniv.ac.in
- **Dr. Chayan Halder,** Assistant Professor, Ramakrishna Mission Vivekananda Centenary College, Rahara, India  
Mail - chayan.halder.rkmvcc@gmail.com