

Roshani Vijayan

Bachelor of Computer Application Honours with Research (4 years STEM Degree : 2023-27)

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EXPERIENCES

Microsoft

January 24 onwards

Microsoft Learn Student Ambassador - Alpha

- Received four Trophies in Azure Quantum Computing, Azure AI Fundamentals, Cloud Computing and Git/GitHub
- Received fifteen Microsoft Badges and Certificates for successfully passing different learning modules, viz Quantum Development Kit, Azure Quantum Resource Estimator, Q# Programming, Azure AI Services, Machine Learning, Artificial Intelligence and Quantum Computing

J.P. Morgan Chase & Company

December 2023

Agile Software Development - Virtual Internship/Job Simulation on Forage

- Drafted eight user stories using Trello and prioritized them by estimating the relative level of effort required
- Ran the Scrum team's daily standup to effectively plan the day and energize the team members
- Conducted a sprint review to gather feedback on the Scrum's work and a sprint retrospective to align on opportunities for improvement in future sprints

Bertelsmann Next Generation Tech Booster Scholar (2023-24)

15 Dec 2023 - 15 Feb 2024

Agile Software Development - Nano Degree

- Agile Software Development Methodologies
- Scrum, Kanban, Waterfall Methodologies and XP frameworks
- Software Development Project Management

AWS AI & ML Scholar, AWS & Udacity

15 Oct 2023 -15 Jan 2024

AI Programming with Python - Nano Degree

- Selected among 1000 scholarship recipient around the world by AWS (Amazon Web Services) to pursue Artificial Intelligence & Machine Learning for Nano Degree Program at Udacity and direct mentorship under Session Lead.
- Completed a python machine learning project known as image classifier to Identify Dog Breeds.
- Completed deep learning AI Image Classifier project using Python, PyTorch and CNN on cloud GPU(CUDA) platform.
- Completed entire 4 months program in one month only.
- Continuously had top position in Cohort Leaderboard.

J.P. Morgan Chase, USA

September 2023

Asset Management - (Virtual Internship/Job simulation on Forage)

- Gathered clients' key investment objectives, risk appetite, investment restrictions, and other relevant information to enable recommending a suitable investment solution
- Constructed suitable investment portfolios for two individuals based on their unique risk profiles
- Carried out quantitative fundamental analysis for two stocks and made a recommendation to clients based on their investment objectives
- Calculated Key Performance Indicators (KPIs) for a clients' investment portfolios

New York Jobs CEO Council, USA

September 2023

Financial Analyst - (Virtual Internship/Job simulation on Forage)

- Completed a Simulation focused on financial analysis as an Analyst on the technology team at an investment bank.
- Determined the feasibility of establishing a partnership with BigTechCompany.
- Demonstrated strong communication skills by articulately presenting findings and opinions to senior bankers.

Prudential Group Investment Management (PGIM, USA)

August 2023

Fixed Income - (Virtual Internship/Job simulation on Forage)

- Learnt and completed various tasks on actual business case on Fixed Income Asset Management.
- PGIM Fixed Income Introductory course
- Credit Research task: Extracting Key Financial Information & Calculating Adjusted EBITDA
- Portfolio Analysis Group task: Calculate Portfolio's Key Performance Indicators

- Credit Research task: Presenting a Listed Company's Earnings
- Client Advisory Group task: Manage Investment Exposure Breach

J.P. Morgan Investment Bank, USA

July 2023

Investment Banking - (Virtual Internship/Job simulation on Forage)

- Completed J.P. Morgan Investment Banking Virtual Experience Program on Forage - August 2023.
- Merger & Acquisition targets
- Target information and auction process
- Financial analysis – DCF Model for Valuation and Sensitivity Analysis
- Investment recommendation

WorldQuant University, USA (Remote)

22nd July 2023

Data Science Lab - Student learner

Responsibilities: Working on 8 end-to-end, applied data science projects of the Applied Data Science Lab module at WorldQuant University, where I have already completed first four projects and working on rest. The projects included scientific computing, data wrangling, machine learning and natural language processing with Python.

- **HOUSING IN MEXICO:** A dataset of 21,000 properties was used to determine if real estate prices are influenced more by property size or location. Imported and cleaned data from a CSV file, built data visualisations, and examined the relationship between two variables using correlation.
- **APARTMENT SALES IN BUENOS AIRES:** Built a linear regression model to predict apartment prices in Argentina. Created a data pipeline to impute missing values and encode categorical features, and then improved the model performance by reducing overfitting.
- **AIR QUALITY IN NAIROBI:** Built an ARMA time-series model to predict particulate matter levels in Kenya, extracted data from a MongoDB database using pymongo, and improved model performance through hyperparameter tuning.
- **EARTHQUAKE DAMAGE IN NEPAL:** Built logistic regression and decision tree models to predict earthquake damage to buildings, extracted data from a SQLite database, and revealed the biases in the data that can lead to discrimination.
- **BANKRUPTCY IN POLAND:** Built random forest and gradient boosting models to predict whether a company will go bankrupt, navigated the Linux command line, addressed imbalanced data through resampling, and considered the impact of performance metrics precision and recall.
- **CUSTOMER SEGMENTATION IN THE US:** Built a k-means model to cluster US consumers into groups, used principal component analysis (PCA) for data visualization, and then created an interactive dashboard with Plotly Dash.
- **A/B TESTING AT WORLDQUANT UNIVERSITY:** Conducted a chi-square test to determine if sending an email can increase program enrollment at WQU, built custom Python classes to implement an ETL process, and created an interactive data application following a three-tiered design pattern.
- **VOLATILITY FORECASTING IN INDIA:** Created a GARCH time series model to predict asset volatility, acquired stock data through an API, cleaned and stored it in a SQLite database, and then built an API to serve model predictions.

Interglobus Trading Private Limited, Pune (onsite)

20th March 2023 - 23rd June 2023

Intern - Software Development

Responsibilities:

- **Web Development:** Designed, coded, and modified company website, from layout to functionality, according to specifications or project requirements. This involves using programming languages such as HTML, CSS, JavaScript etc.
- **Front-End Development:** Developed user interfaces that are visually appealing, user-friendly, and responsive. Implemented designs and ensured seamless integration with back-end systems.
- **Back-End Development:** Building and maintaining server-side applications and databases to support admin web applications. This includes handling server requests, managing databases, and implementing APIs for data exchange.
- **Troubleshooting and Debugging:** Identified and fixed bugs, performance issues, or other technical problems. Conducted thorough testing and quality assurance to ensure smooth functioning of the website across different browsers and devices.
- **Security and Performance Optimisation:** Implemented security measures to protect web applications from potential vulnerabilities, such as cross-site scripting (XSS) or SQL injection. Optimised website performance, including page load times and overall responsiveness, to provide a smooth user experience.
- **Collaboration and Communication:** Collaborated with cross-functional teams, including designers, other developers, and project managers, gathered requirements, clarified specifications, and ensured timely completion of projects.

- **Documentation and Maintenance:** Documented codes, project requirements, and technical specifications for future reference. Performed periodic maintenance tasks, such as updating software versions, fixing broken links, and monitoring website performance.

PROFESSIONAL CERTIFICATIONS & ACHIEVEMENTS

- AI Programming with Python - Nano Degree from Udacity under **AWS AI & ML Scholarship 2023**.
- **Professional Certificate in C Programming with Linux (2023) : Dartmouth College, USA** (An Ivy League research university, USA). Five certificates on Advance C programming and two certificates on Linux. Scored 100% marks in each certification courses. (<https://records.edx.org/75f70b19b26d41bf81a236fb8dded8f4>)
- **Duke University, USA. Certificate for Programming Fundamentals & Algorithms** : (<https://www.coursera.org/account/accomplishments/certificate/RPM4JBV9WZ3B>)
- **CFA Investment Foundations Certificate (CFA Institute, USA, ID: 9368975)** : Passed and certified by CFA Institute USA, on Mar 21, 2022. Performance above 99 percentile among the entire cohort. (<https://basno.com/abxdbto9/certificate>)
- **MIT, USA Certificate** : Becoming an Entrepreneur, 89% marks, Certificate issued on March 23, 2017.
- **TOEFL** (ETS, USA, Appointment Number : 4963 4122 2708 2624) Score : 103 out of 120, TOEFL iBT taken on December 04, 2022 having test scores as Reading : 27/30, Listening : 21/30, Speaking : 28/30, Writing : 27/30
- **Google Generative AI Certifications:** Generative AI Fundamentals, Responsible AI, Large Language Models (Sept 2023)
- **Google Analytics Certification** : Google Analytics Academy, October 2013.
- **Power Searching with Google** : Certificate by Google, October 2012.

EDUCATION

- **Bachelor Degree - Computer Science Research (4 Year Degree : 2023 - 27)** : xxxxxxxxxxxxxxxxxxxxxxxxx
- **Indian School Certificate (CISCE – ClassXII)** : Passed from **The Bishop's School, Pune**, India, one of most renowned school of India, Certificate issued in May, 2023 in Commerce stream with first division. Main subjects are Accountancy, Business Studies, English, Commerce and Economics.
- **Secondary School Examination (CBSE - Class X)** : Passed from **The HDFC School, Pune**, India with First division, Certificate issued in August, 2021. Main subjects are Mathematics, Science, Social Studies, English and French.
- Primary and Middle Schooling at RAIS, Bangkok, Thailand, having long term international exposure.

SKILLS & HOBBIES

- **RUBIK CUBES** (2x2, 3x3, 4x4, 5x5) solver in a minutes. (https://en.wikipedia.org/wiki/Rubik%27s_Cube)
- **AWS DeepRacer** : Amazon DeepRacer championship to code and automated car using reinforcement learning (RL) . Actively participated in DeepRacer Machine Learning challenge and completed three laps of driving circuit under three minutes. <https://aws.amazon.com/deepracer/>
- Ability to learn new languages fast. Basic French and Japanese apart from different Indian languages.
- Well versed in playing Guitar and English vocals
- Avid book reader : Non fiction and fictions

PERSONAL INFORMATION
