VIKRAM BADHAN

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EDUCATION

New York University, New York, NY

Master of Science, Computer Science

Sep '21 - May '23

Guru Gobind Singh Indraprastha University, New Delhi

Bachelor of Technology, Information Technology

Aug '14 – May '18

EXPERIENCE

Indus Communities
Data Analyst

Aug '24 - Present

Houston, TX

- Automated 150K+ invoice downloads from Entrata using Selenium & Puppeteer, reducing manual effort by 95% and improving financial reconciliation accuracy.
- Developed RealPage API integrations to automate data exchange, optimizing the renewal process for lease expirations and reducing lease processing time by 40%, while streamlining utility billing for 38+ properties.
- Led a Market Data Analysis project using ApartmentIQ to evaluate rent prices, fees, and amenities, shifting to a data-driven pricing strategy that improved rate-setting efficiency by 25% and increased revenue potential by 10%.

One Community Global Aug '23 – June'24

Software Engineer

San Gabriel, CA

- Developed features and fixed bugs in the HGN app using React.js, Node.js, Express.js, and MongoDB, improving task management accuracy by
 25% and achieved a 20% reduction in deployment time by actively managing and optimizing the CD/CI pipeline through Jenkins.
- Implemented database query optimizations and integrated Redis caching, reducing response times from 2 seconds to 0.5 seconds.
- Reviewed and tested 100+ pull requests, ensuring adherence to TDD and SOLID principles, reducing bugs by 10%, and increasing code coverage
 by 35% through Jest unit tests to prevent critical production issues.

New York University – IT Department

May '22 – May '23

Software Engineer

Manhattan, NY

- Developed SupportHub, a cloud-based IT ticketing platform using React.js, Express.js, and MongoDB, hosted on AWS. Integrated an LLM-powered chatbot, automating ticket triaging and responses, improving resolution efficiency.
- Streamlined deployment processes by migrating the codebase from Snowflake to GitLab, leveraging AWS Lambda (Python runtime) for automation. Reduced deployment time by 30%, enabling faster iteration and code delivery.
- Configured AppDynamics dashboards and real-time alerts for proactive performance monitoring, reducing mean time to detection (MTTD) by 40% and enhancing system stability.

New York University – Department of Civil and Urban Engineering Software Developer

Feb '22 – May '22

Brooklyn, NY

- Developed a cutting-edge application utilizing ReactJS's ThreeJS library to render and visualize complex BIM (Building Information Models) models, resulting in a 40% reduction in rendering time compared to previous methods.
- Utilized Python's IFCopenShell library and React-Three-Fiber renderer to efficiently parse and extract over 3000 mesh components from BIM models, improving data processing speed by 40%.
- Mapped the mesh components with the BIM model to dynamically show highlights, annotations, and text overlay on a selected group of meshes.

Innefu Labs

July '20 – Aua '20

Business Analyst

New Delhi, India

- Utilized the Big Data framework "Prophecy" to conduct text analysis, image analysis, and predictive intelligence for law enforcement clients, resulting in a 30% increase in efficiency in identifying potential threats.
- Collaborated with client and developer team to gather requirements, resulting in a 20% reduction in development time.

PROJECTS

AWS Smart Health App (Link) STACK - S3, Lambda, JavaScript, Python, DynamoDB, OpenSearch, Sagemaker

- Developed a JavaScript based online meal recommendation and food delivery app that suggests meal to users based on their nutritional goals.
- Utilized an online food dataset which included meals with their nutritional values to train a machine learning model which gave us customized meal plans for the users to choose.

Dining Concierge Chatbot using AWS (Link) | STACK - S3, Lambda, Lex, SNS, SQS, Python, JavaScript, DynamoDB, OpenSearch

- Developed an AWS Lex Chatbot that recommends restaurants in New York City. Scraped data from Yelp, indexed the results using OpenSearch and stored the data in DynamoDB.
- Deployed Lambda function to interpret chat inputs and send recommendations to the user's phone using SNS.

Qatar 2022 World Cup Predictor (Link) | STACK – Python, PySpark, Kafka, SparkML

- Conducted in-depth data analysis on FIFA World Cups (2015-2022) and built predictive models (Random Forest, XGBoost) to forecast team performance and match outcomes for Qatar 2022, achieving R² scores as low as 0.144.
- Predicted player market values, wage trends, and potential retirements to identify top players for club signings.

TECHNICAL SKILLS

- Languages: Java, Python, JavaScript, HTML, CSS
- Frameworks: Node.js, Express.js, React.js, Three.js, D3.js, Selenium, Puppeteer, Spring Boot, REST, React-Three-Fiber
- Database / Tools: MySQL, MongoDB, Redis, Postgres, Git, PySpark, Kafka, Jenkins, Postman, AWS, Kubernetes, Docker