

# Nilanjan Roy

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[LinkedIn](#) | [Github](#) | [Portfolio](#)

## TECHNICAL SKILLS

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- **Operating Systems:** Unix, Linux (Ubuntu), Windows, MacOS
- **FrontEnd (UI/UX):** Angular, ReactJS, HTML, Bootstrap, CSS, SCSS / SASS
- **BackEnd Technologies:** Java, JavaScript, Typescript, Python, NodeJS, JQuery, Ruby, AJAX, JSON, C++, C#
- **DBMS:** MySQL, Oracle DB, MS SQL, CSV, Postgre SQL, MongoDB, Hibernate
- **Frameworks & Misc tools :** SpringBoot, Maven, Apache Tomcat, Kafka, Docker, Kubernetes, Jenkins, Agile, Kanban, Jira, CI/CD Pipelines, Azure, AWS EC2, S3, DevOps, Postman, Machine learning (ML), Artificial Intelligence (AI) & Chatbots.
- **IDEs:** Netbeans, Eclipse, Visual Studio Code, IntelliJ, STS(Spring Tool Suite)

## WORK EXPERIENCE

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- Vertige | Philadelphia, PA** *Fullstack Software Developer* **Jan 2025 - Present**
- Built **REST** APIs for UI of Vertige Healthcare Mobile Application using **Node.js** & **Typescript**, hosted on **AWS EC2** with **S3** for media storage. **MongoDB** and **Firebase** is used for real-time DBMS and cloud operations to scale backend functions.
  - Created automated **CI/CD** pipelines using **GitHub Actions** to streamline deployments and push backend updates to **AWS** and **Firebase** and **MongoDB** with minimal downtime.
  - Migrated the mobile codebase from **Swift** to **React Native** (Expo) for cross-platform compatibility, integrating Apple **IAP** and backend subscription validation via **Firebase**.

- HCL (Cynet Systems) | Noida, India** *Fullstack Software Developer* **Sep 2022 – Aug 2023**
- Designed **GraphQL** APIs for real-time candidate data processing system leveraging in-house HCL database, with **React.js** & **Angular** as frontend and micro-frontend while the backend microservices were created with **Java** and **Node.js**.
  - Used **Springboot** framework for MVC architecture and established ORM using **Hibernate** with **PostgreSQL** database.
  - Containerized the application using **Docker** and automated the build and test process with **CI/CD** pipelines using **Jenkins**, and orchestrating the deployment through **Kubernetes** which was further used to produce and consume **Kafka** events.

- Infosys (Mastech Digital) | Noida, India** *Fullstack Software Developer* **Jan 2021 – Sep 2022**
- Spearheaded multiple projects for Infosys, using **React.js** for managing the frontend development, designed the backend **REST** APIs for **Node.js** & **Java microservices**. Architected the application layout with **SpringBoot** framework. **JDBC** and **Hibernate** were used for database mapping into **PostgreSQL**, reducing the data processing time by 20%.
  - Integrated **React** with **JavaScript**, and **AJAX** to build a dynamic frontend, cutting page load times by 18%. Forged a scalable architecture by creating **Docker** containers and further automating test & build process with **CI/CD** pipelines using **Jenkins**.
  - Deployed the **Docker** containers using **Kubernetes** for load-balancing and further used **Kafka** for stream-lining the messages.

## ACADEMIC PROJECTS

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- Whiskerwags | [Github](#)** | MERN, Node.js, React.js, RESTapis, Express, Multer, Bcrypt, MongoDB, Web Development, Postman
- Pet Adoption portal, created on visual studio by using Node on backend and React on frontend with Express framework. Separate user and admin portals with Bcrypt for hashing passwords, Multer as a middleware for image uploads, Axios for API calls on frontend and MongoDB cluster deployed on AWS to handle global data requests.

- MyPortfolio | [Github](#)** | React, MaterialUI, Node.js, Github Actions
- Portfolio website designed accordingly for different screen sizes, hosted and automated with the help of Github Actions.
  - UI designed with help of React.js, Material UI and backend APIs over Node.js.

- StockOptimate | [Github](#)** | React, MSSQLServer, PowerBI, NodeJS, Postman
- Architected an ER Data Model and database for stock management, improving data accuracy by 20%. Constructed front end with React and Node.js for CRUD operations, enhancing data handling speed by 15%.
  - Visualized data on Power BI, boosting understandability and decision-making efficiency.

- Pathfinder | [Github](#)** | Java, Ajax, HTML5, CSS, Bootstrap, Springboot, Microservice, Hibernate, My SQL & Thymeleaf
- User-centric course finding portal, the algorithm and architecture of the software was designed in Python and built with Java Microservices, Springboot and Hibernate ORM with MySQL DBMS, platform independent including Unix and Linux.
  - Refined user experience by integrating Thymeleaf with HTML5, CSS, and Bootstrap.

- Hospital Administration System | [Github](#)** | Java, SwingAPI, MySQL
- Created a standalone app for managing patient appointments and doctor data, with JAVA 20 and Netbeans IDE.
  - Used Swing API and JDBC (MSSQL Server) for data management, reducing retrieval time by 35%.

## EDUCATION

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- MS in Computer Software Engineering from **Northeastern University Boston** Sep 2023 - Dec 2025
- (MBA) in IT and Finance from **Dr. A.P.J Abdul Kalam Technical University** May 2021 - Jun 2023
- Bachelors in Computer Science from **Indira Gandhi National Open University** Sep 2017 - Dec 2020