PRAKHAR RATHI

Address: Vogeliusweg 23B.2.6, 33100 Paderborn

Phone: +49 176 569 497 14

E-mail: prakhrathi@gmail.com

Nationality: Indian

Family Status: Single

LinkedIn: https://www.linkedin.com/in/rathiprakhar/

Website: https://prakharr0.github.io/myportfolio/

PROFILE

Resourceful Master's graduate with 17 months of professional experience working productively in dynamic environments. Using Java for more than 7 years to develop software, Rest APIs, and full-stack web applications. Proven ability to learn new technologies quickly through various projects from Augmented Reality Android application to Sentiment Analysis of consumer reviews on eCommerce websites. Enthusiastic team player focused on achieving project objectives with speed and accuracy. Seeking to employ my existing skills and my eagerness to learn to design innovative software.

WORK EXPERIENCE

Research Assistant (Secure Java Software Development), Fraunhofer IEM, Paderborn, Germany

17/05/2021 – 31/03/2022

- Developed a user-centric full-stack web application with the team and containerized the application along with the MySQL database.
- Generalized the deployment process for generating multiple application repositories, cutting down the process to a single stage in the Continuous Integration (CI) pipeline.
- Planned, modified, and programmed vulnerabilities in the code and implemented unit tests.
- Coordinated software documentation of implemented features and vulnerabilities.
- Tech. stack: Java, Spring Boot, REST API, Junit, Mockito, SQL queries, MySQL database, Java Persistence API (JPA), Thymeleaf, HTML, CSS, Shell scripts, Python, Docker, Git, GitLab CI Pipeline.

Project Engineer, Wipro Limited, Bengaluru, India

09/07/2018 – 23/02/2019

- Worked with software development and testing team members to design and develop robust solutions to meet client requirements for functionality, scalability, and performance.
- Modularized and updated old code bases to modern development standards with clean code that is easy to understand, operate, and test.
- Tech. stack: Java, JavaScript, Android, HTML, CSS, Python, REST API, MySQL.

EDUCATION AND TRAINING

Master of Science (M.Sc.) in Computer Science

Universität Paderborn, Germany

01/10/2019 – Present

Specialization – Software Engineering

Thesis: Automated Cell Header Generation for Machine Learning Jupyter Notebooks at Heinz Nixdorf Institute, Paderborn

- Extended a Python static analyzer to generate call graphs with cell-sensitive call site identification for Jupyter notebooks, line-sensitive call site identification for Python source files, and external library calls.
- Programmed unique software to annotate input Jupyter notebook'' code cells with corresponding Machine Learning phases as headers in preceding markdown cells.
- Established a benchmark suite with over 120 Python programs to test the extended static analyzer.
- Fetched Jupyter notebooks from Kaggle programmatically and created another benchmark to assess software'' performance on real-life notebooks.
- Tech. Stack: Python, Jupyter Notebooks, LaTex.

Bachelor of Technology (B.Tech.) in Computer Science and Engineering

Dr. A.P.J Abdul Kalam Technical University, India

01/08/2014 – 30/06/2018

- Built strong fundamentals in Data Structures, Principles of Programming Languages, and Relational Database Management Systems, Design and Analysis of Algorithms, etc.
- Participated in IT clubs and contributed to various programming tasks and projects.
- Volunteered for maintaining security with a team during inter-college techno-cultural events held in the institute.

Industrial Training in Java – J2EE

Aptron Solutions Private Limited, Noida, India

02/07/2017 – 09/10/2017

- Contribute to Java – J2EE programming tasks.

Training in Java – J2EE

Ducat Noida, India

12/12/2016 – 11/04/2017

- Received in-depth training in object-oriented programming (OOPS).
- Contributed to Java projects.

PROJECTS

VARobot: Virtual and Augmented Reality Assisted Robot Programming (Master's group project)

15/03/2020 – 15/03/2021

- Contributed to the website development: https://varobot-pg.github.io/
- Conceptualized and deployed single-handedly a unique approach of programming a Lego NXT Mindstorm robot by programming an Android plugin for Unity using Java for LeJOS and Android Studio as the backend with high accuracy.
- Programmed an Android app for Robot Programming in AR with the team.
- Tech. Stack: Java, Unity 3d, C#, Android, LeJOS, Python, HTML, CSS.

Student Service: Full Stack Web Application

04/12/2020 – 05/12/2020

- Programmed a full-stack web application to store and retrieve students' data in a MySQL database.
- Built a responsive UI and the RESTful API and set up communication between the components.
- Tech. Stack: Java, Spring Boot REST API, MySQL database, JPA, React, JavaScript, HTML, and CSS.

Sentiment Analysis of Scraped Consumer Reviews (Bachelor's group project)

15/04/2017 – 15/03/2018

- Contributed to the UI and REST API development.
- Scraped the data related to the searched item from 3 giant e-commerce websites.
- Programmed sentiment analysis script and arranged reviews into 3 categories.
- Documented the approach and results in a report.
- Tech. Stack: Python, Scrapy, Beautiful Soup, HTML, CSS, MongoDB, JSON.

SPECIAL SKILLS

Backend Development (Expert)	Full Stack Application Development (Advanced)
Database Management (Advanced)	Software Documentation (Advanced)

SOFTWARE SKILLS

Java(Expert)	Object-oriented Programming – OOPS (Expert)
Java Database Connectivity – JDBC (Expert)	Spring Boot (Advanced)
Java Persistence API – JPA (Advanced)	Hibernate (Advanced)
JUnit (Advanced)	REST API (Advanced)
Python (Advanced)	Git (Advanced)
MySQL (Advanced)	PostgreSQL (Advanced)
ReactJS (Intermediate)	JavaScript (Intermediate)
HTML (Intermediate)	CSS (Intermediate)
Docker (Intermediate)	Mockito (Intermediate)
GitLab – CI (Intermediate)	C# (Beginner)

LANGUAGE SKILLS

English: Fluent (C1)	German: Intermediate (B1)
Hindi: Native	