PRANAV AGRAWAL

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EDUCATION

George Mason University — **Expected May 2024**
Master of Science in Computer Science **GPA : 3.67** — Fairfax, Virginia

Graphic Era University — **July 2014 - May 2018**
Bachelor of Technology in Computer Science and Engineering — Dehradun, India

TECHNICAL SKILLS

JEE Technologies	Core Java, Spring, Spring Boot, Web Services (SOAP API and REST API), Junit, Swagger API
Web Technologies	Html5, JavaScript, CSS, XML, Json
Databases	SQL Server, MySQL, Oracle 11g
Tools	BitBucket, GIT, Log4j, Jenkins, SVN, SourceTree, Postman, SoapUI, WinSCP, PuTTY
IDE	Eclipse, JBoss Developer Studio, STS, Rational Application Developer
Application Server	Apache Karaf, Apache Tomcat, IBM WebSphere Liberty
Others	C, C++, Python, Angular JS, Unix/Shell Scripting, Red Hat Fuse, Project Planning, Task Management, MVP Creation, SCRUM & Agile methodology, Jira, Software Development

PROFESSIONAL EXPERIENCE

Graduate Research Assistant — **May 2023 - present**
George Mason University - College of Engineering and Computing — *VA, USA*

Ethereum Consensus Client Diversity Identification and Verification

- Understanding data flow from ethereum execution clients to Lighthouse beacon node.
- Feature engineering on the data observed from the beacon node using Ratcliff and Obershelp distance and Spearman correlation coefficient.
- Applying PCA to achieve dimensionality reduction, feature selection, and noise reduction ;t-SNE for data visualization and exploration.
- Training robust kNN model to precisely classify diversity of various consensus clients to understand proper usage.

Application Development Senior Analyst — **May 2021 - Jul 2022**
Accenture — *Bangalore, India*

EHP Application *(Elevance Health (USA))*

- Designed and Developed APIs and modules catering to distinct micro-services to align with specific business needs, automating service execution with Cron expressions, to process batch files and improved execution time significantly.
- Integrated Spring transaction management to oversee and handle incomplete DB transactions, while incorporating Log4j for robust logging functionality.
- Performed unit testing to increase code coverage upto 90% and proactively addressed security and data leakage vulnerabilities identified by SonarQube and CheckMarx to demonstrate commitment to quality.
- Developed a custom shell script to facilitate application deployment and execution on servers, streamlining the deployment process.

Project Engineer — **Nov 2018 - May 2021**
Wipro Limited — *Bangalore, India*

AWSD Migration from Fuse 6.2 to Fuse 7.6 *(Aviva Health Insurance (UK))*

- Developed APIs to implement code for Approval and Activation in the application life cycle, and integrated AWS KMS to achieve secure user authentication.
- Migrated code to a new framework by upgrading dependencies and implemented required code changes correspondingly.
- Updated Apache Camel Fuse routes and then deployed all the structures in Karaf application server in form of OSGi bundles. Deployed, built and tested the code in Jenkins and released them.
- Automated logs for stats and event routes to accomplish proper Splunk Logging.

PROJECTS

Bank Management System. Certified by Infosys Limited, created a comprehensive application using Java and Spring Framework, with MS SQL database for robust management of checking, saving accounts, and debt, management. **Predictive Analysis for Heart**

Disease Detection. Implementation of Gradient Descent with Logistic Regression in Python, together with K-Nearest Neighbor model and Cross Validation to classify the data.

CERTIFICATION AND ACHIEVEMENTS

JAVA L2 certification from Wipro Limited - February 2020.
Software Engineering and Agile Virtual Experience Certified from JPMorgan Chase & Co., Forage.
Received Client Value Creation Award in January and Pinnacle Award FY22 in April 2022.
Appreciated with Winner Circle Points and Client Appreciation in January 2021.