# JAGANARUL A

<u>Jaganarul179@gmail.com</u> Address : Tirupattur district <u>PORTFOLIO</u>

8072275209 <u>LinkedIn</u>

### **Professional Summary**

AI-driven Java Developer with practical experience in designing and developing intelligent systems, including an AI-powered chatbot and a fraud detection engine integrated into web platforms. Specialized in applying **Natural Language Processing (NLP)** techniques, rule-based logic, and heuristic analysis to build smart, responsive applications. Skilled in **Java**, **Spring Boot**, **RESTful APIs**, and **JSON** for robust backend development, with proficiency in **MySQL**, **JDBC**, and **Hibernate** for efficient data handling.

Well-versed in **HTML**, **CSS**, **JavaScript**, and **Thyme leaf** for web integration of AI services. Familiar with **Git**, **GitHub**, and modern IDEs such as **IntelliJ IDEA**, **Eclipse**, and **VS Code**. Completed a **Java Internship** at **Zidio Development**, gaining hands-on experience in backend development, API integration, debugging, and performance optimization. Passionate about AI technologies, currently expanding expertise in AI model design, backend automation, and scalable architecture. Strong communicator with proven problem-solving, time management, and collaboration abilities.

### **Skills**

- Languages: Java (Advanced), SQL (MySQL), HTML, CSS, JavaScript
- Frameworks & Libraries: Spring Boot, Spring Framework, Hibernate, JDBC, JPA, Thymeleaf
- AI & Intelligent Systems: NLP (Rule-Based Systems), Basic AI Model Design, Heuristic Analysis, ISON-based AI Response Handling
- Backend & APIs: RESTful API Design, JSON Data Handling, Secure API Integration
- Tools & IDEs: IntelliJ IDEA, Eclipse, Visual Studio Code, MySQL Workbench
- **Version Control & Collaboration:** Git (Branching, Merging), GitHub (Project Hosting & Collaboration)
- Web Integration: Responsive UI with Thyme leaf, HTML/CSS/JS integration with Java backend
- Soft Skills: Strong Communication, Analytical Thinking, Time Management, Team Collaboration
- **Current Focus:** AI-driven Java applications, Spring Boot API development, scalable backend architecture

# **Experience**

#### Java Intern - Zidio Development

- Contributed to backend development by implementing and maintaining modules using Java and Spring Boot.
- Performed debugging, code optimization, and performance tuning to ensure efficient application functionality.
- Assisted in **API integration** and database operations using **SQL** to support core business features.

• Collaborated with senior developers following **Agile methodologies**, gaining exposure to professional software development workflows.

## **Projects**

### 1. Online Banking System inbuild AI chatbot

**Technologies:** Java, JSON, NLP, Web Integration

- Designed and implemented a rule-based, text-driven AI chatbot using Java to simulate real-time banking assistance.
- Utilized JSON for dynamic response handling and structured conversation flow.
- Applied NLP concepts to interpret user queries and deliver context-aware replies.
- Integrated the chatbot into a responsive website interface for interactive banking support.

## 2. Using AI – Cold Mail Generator

**Technologies:** Python, LLaMA 3.1, chromabd, chatling, JSON, REST APIs

- Developed a generative AI assistant using Meta's **LLaMA 3.1** model for natural language response generation.
- Utilized **Hugging Face Transformers**, **Auto Tokenizer**, and **Text GenerationPipeline** for efficient model handling and inference.
- Enabled **multi-turn dialogue** with **context retention** and dynamic memory management.
- Applied advanced **prompt engineering** techniques for task-specific response control and content filtering.

# 3. AI-Enhanced Personal Portfolio Website

**Technologies:** HTML, CSS, JavaScript, GitHub Pages

- Developed a personal portfolio featuring a custom AI chatbot for guided user interaction.
- Implemented JavaScript-based chatbot logic to help users navigate content dynamically.
- Deployed the site using GitHub Pages with full mobile responsiveness and performance optimization.

# 4. Beyond the Firewall Demystifying Offline Device Security Vulnerability

**Technologies:** Embedded Security, Firmware, System Design

- Analyzed and identified physical security vulnerabilities in offline systems.
- Implemented robust protection strategies like secure boot mechanisms and firmware validation.
- Enhanced system resilience through detailed risk assessment and defense architecture planning

#### **Education**

#### **Bachelor of Engineering (Computer Science and Engineering)**

Priyadarshini Engineering College, Anna University

CGPA: 8.02 | 2020 - 2024

#### **Higher Secondary Certificate (HSC)**

Universal Matriculation Higher Secondary School, Jolarpet

Percentage: 61% | 2019 - 2020

#### **Certifications**

• **SQL & Relational Databases** – IBM Developer Skills Network (July 2024)

- Full Stack Web Development GUVI (September 2023)
- **Cybersecurity Fundamentals** Udemy (December 2023)
- Introduction to Networks CISCO Networking Academy
- TCS iON Career Edge Communication, Presentation & Interview Skills (June 2024)
- **Java Programming Masterclass** Udemy (june, 2025)
- **AI for Everyone** DeepLearning.AI (Coursera) (optional if taken or planned)
- **Prompt Engineering for LLMs** DeepLearning.AI (Coursera) (optional highly relevant to LLaMA)
- **Introduction to Generative AI** Google Cloud Skills Boost (optional very good for GenAI roles)

#### Additional Information

- Open to relocation and available for immediate joining.
- Actively expanding expertise in **Artificial Intelligence**, focusing on chatbot development, fraud detection systems, and generative AI technologies.
- Continuously upskilling in **Spring Boot** and **RESTful API** development to strengthen backend capabilities and scalable architecture design.