Darshan Golchha

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SKILLS

Programming Languages: Java, Python, JavaScript, C, SQL, R.

Frontend: HTML5, CSS3, React, Tailwind CSS, Three.js

Backend: Spring Framework, Spring Security, Django, Flask, JPA, Maven, RESTful APIs, Web Sockets, JWT

Databases and Cloud: MySQL, MongoDB, AWS, AWS S3, GCP

Software Development & Tools: Git, Docker, Feature & Application Implementation, Testing & Deployment, Software Design, Code Development, SDLC, Agile

Specialized Domains: Web Development, Mobile App Development, UI/UX, TensorFlow, Scikit-learn.

EDUCATION

Expected in 05/2026

Bachelor of Science:

Computer Science and Data Science

University of Wisconsin-Madison

Madison, WI

- **Relevant Coursework and Training Programs**: Object-Oriented Programming, Data Structures and Algorithms, Database Management and SQL, Data Science Programming (Python), Data Science Modeling (R)
- GPA: 3.8/4

LINKS

Website: darshangolchha.com/

LinkedIn: linkedin.com/in/darshan-golchha/

GitHub: github.com/darshan-golchha/

ACTIVITIES

- Goalkeeper, Men's 7vs7 Soccer Team, showcasing leadership and **adaptability in high-pressure situations**.
- Member, Wisconsin Robotics, Software Team, demonstrating **strong teamwork and collaboration**.

AWARDS

- Scholastic Excellence Awards in 2016 & 2019 for **consistently delivering outstanding results.**
- Dean's List Academic Honor 2022, 2023 showcasing **consistency and commitment**.
- Scholar Badge for academic **excellence** in 2021.

WORK EXPERIENCE

Opstree Solutions - Software Engineer and Machine Learning Intern

Noida, Uttar Pradesh, India

05/2024 - 08/2024

- Developed a dynamic **React** form capturing 50+ infrastructure requirements, boosting project **accuracy** by 30%, and **enhancing user experience** across the organization.
- Built a **Python/Django** backend, integrating **Google Gemini LLM** for precise infrastructure recommendations, improving real-time updates, and reducing manual input by 40%.
- Optimized **CI/CD** pipelines by integrating **SonarQube, SonarCloud**, and a severity calculator, cutting **critical** production bugs by 40%, and reducing manual review time by 60%.
- Engineered an anomaly detection system using **scikit-learn's Isolation Forest**, proactively identifying unusual patterns, and improving system monitoring.
- Skills Enhanced: SonarQube, SonarCloud, Python, JavaScript, Docker, Django, Java, Spring Boot, RESTful APIs, LLM, sklearn, MySQL, HTML, CSS, Bit Bucket

Nucleus Software Exports Limited - Software Engineer Intern

Noida, Uttar Pradesh, India

06/2023 - 08/2023

- Developed Nucleopedia, a knowledge management system that reduced onboarding time by 70% for over 1,500 employees, streamlining training and information access.
- Optimized database performance by designing normalized **MySQL** tables, achieving a 75% reduction in latency, and improving data retrieval efficiency.
- Enhanced security by implementing **Spring Security** and **JWT**, reducing unauthorized access by 98% through proactive threat mitigation.
- Improved system efficiency by integrating **JPA** repositories for fast search, reducing web app reload time by 60% with **React**, and **Java Spring** optimizations.
- Skills Enhanced: Java, Spring Boot, REST API, MySQL, HTML, CSS, JavaScript, React, AWS, S3.

PROJECTS

AI Commit Risk Analyser *(Opstree Solutions - Work Project)*

- Integrated SonarQube & SonarCloud for multi-language code analysis (29 languages).
- Designed a Bug Frequency Server using LLMs, reducing critical production bugs by 40% and improving review efficiency by 50%.
- Built a severity calculator, improving issue prioritization by 30% and cutting manual review time by 60%.
- Developed a Master Severity Index, increasing code quality gate pass rates by 25%.
- **Tech Stack:** SonarQube, SonarCloud, Python, Java, Spring Boot, Django, LLM, Docker, MySQL.

Conversia – Global Chat Platform *(Personal Project)*

- Built a dynamic chat platform connecting strangers via shared interests, with auto-managed chatroom.
- Optimized message delivery, reducing latency by 40% using WebSockets.
- Leveraged MongoDB Atlas for efficient data handling and improved scalability.
- Developed a responsive React frontend and scalable Spring Boot backend.
- **Tech Stack:** Java, Spring Boot, React, WebSocket, MongoDB, AWS, S3.

ForeFarm – Smart Agriculture Assistant (*Mad Hacks Hackathon Project*)

- **Weather Prediction**: Built a **machine learning pipeline** using **Random Forest models** trained on county-level data (2019-2024) to predict extreme weather patterns.
- **Full-Stack Development**: Designed a **Flask backend** for API requests and **React frontend** with **Map box integration**, enabling farmers to map farmland interactively.
- **Secure Authentication & Deployment**: Implemented **Auth0** for secure user authentication and deployed the platform for real-world use.
- **Tech Stack:** Python, Flask, MongoDB, React, Auth0, Machine Learning, Random Forest.