Kanchan Chopde *Software Engineer*

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PROFESSIONAL PROFILE

Software Engineer with 4+ years of experience in scalable full-stack development and cloud services.

EMPLOYMENT HISTORY

Research Assistant at Wayne State University,*Detroit,MI* Present

Neural Conversational Agent for Weight Loss Counseling: Protocol for Implementation and Feasibility Study

- Assisted in **code refactoring** to improve modularity, readability, and performance of the neural conversational agent system.
- Supporting **research tasks** related to large language models (LLMs), particularly focusing on **next-sequence generation** and its alignment with weight loss counseling goals.

Teaching Assistant at *Wayne State University*, *Detroit,MI* *Aug 2024 - Apr 2025*

- Conducted **interactive lab sessions** and **mentored students** by addressing challenges and enhancing their understanding of **Python programming** language.

Software Engineer at *Cybage Software Pvt. Ltd., Pune, India* *Mar 2019 - Feb 2023*

- Maintained a web-based tool supporting **1M+ active users** across **100+ countries,** achieving **99.9% uptime.**
- **Collaborated** with a **team of 5 engineers** across **5 product releases**, increasing project **performance** by **35%** via **code optimization.**
- Integrated Synopsys Polaris to resolve **critical vulnerabilities reducing security risks** by **30%.**
- Implemented enterprise solutions using **ASP.NET MVC**, improving system **scalability** by **25%** through **asynchronous programming.**
- **Mentored** junior team members, reducing onboarding time by 60% through **streamlined environment setup**.
- Upgraded DLLs to **SHA256-signed versions**, enhancing system **security and reliability**.
- Developed audit reporting module with **optimized MS SQL Server queries** reducing report generation time from **minutes to seconds.**
- **Streamlined** installation processes for development and release kits by introducing better testing protocols and working closely with teams**, cutting deployment errors** by **30% and speeding up releases by 20%**

SKILLS

Python, C#, .NET, ASP.NET, PyTorch, Flask

Html, CSS, Javascript, ReactJs, NodeJs

Git, Docker, Jira, Azure, GitHub

Agile, CI/CD Integration

MySQL Server, SQL, MongoDB, DynamoDB, Neo4J, Hbase

ML & AI tools: PyTorch, FAISS, BM25, Neural Conversational Agents, LSTMs

EDUCATION

Masters in Computer Science Apr 2025

Wayne State University , Detroit USA , **CGPA: 3.90**

Bachelors in Computer Science Aug 2018

Priyadarshini College of Engineering, Nagpur, India, **CGPA: 9/10**

- PUBLICATION: "PCE College Enquiry Bot" International Journal of Innovations in Engineering and Science, Vol. 3, No.3, 2018

PROJECTS

TrackLog-Healthcare Patient Management System Jan 2025 – Apr 2025

- Developed a **full-stack web application** using **Flask, MongoDB, and React** for managing patient records
- **CRUD operations** for patient data.
- Integrated **Aggregation pipeline in disease analytics** for efficient data processing.
- Designed and deployed **RESTful APIs** to facilitate seamless frontend-backend communication.
- Optimized **MongoDB queries** to enhance performance and scalability.
- **Deployed Frontend & Backend** – React frontend hosted via GitHub Pages, Flask backend deployed on Render.

Neural Conversational Agent for Automated Weight Loss Counseling Jun 2025

- **Contributed in Code refactoring of full-stack AI counseling system** (React + Flask) for weight loss counseling in an **NIH-funded study with 40+ patients**.
- Refactored **front-end React components**, improving UI performance and maintainability.
- Working on including **BM25 + FAISS hybrid retrieval**, boosting counseling response accuracy significanlty

LSTM Text Generator (PyTorch, NLP Project) Jul 2025

- Implemented a **word-level LSTM model** with embeddings, 2 stacked LSTM layers, and dropout for **next-word prediction**.
- Achieved **>90% training accuracy** after 50 epochs.
- Built a text generation pipeline to produce **coherent narrative/poetic outputs** from seed phrases.
- Visualized training loss trends with **matplotlib** for model interpretability.