






# Kanchan Chopde Software Engineer

 kanchan.chopde@wayne.edu  248-840-2378  Detroit, MI  <https://www.linkedin.com/in/kanchan-chopde/>  
 <https://github.com/KChopde>

## PROFESSIONAL PROFILE

Software Engineer with 4+ years of experience in full-stack web development, cloud services (Azure, Docker, CI/CD), and AI/ML integration (LLMs, PyTorch, FAISS, BM25). Strong background in building scalable enterprise solutions and deploying distributed systems with high availability.

## EMPLOYMENT HISTORY

- Research Assistant** at Wayne State University, Detroit, MI Present  
Neural Conversational Agent for Automated Weight Loss Counseling
- 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

- |                                                                 |                                                                         |                                                                                                                                                                                                       |
|-----------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Html, CSS, Javascript, ReactJs, NodeJs</b>                   | <b>Git, Docker, Jira, Azure, GitHub</b>                                 | • <b>Languages &amp; Frameworks:</b> Python, C#, .NET, ASP.NET  MVC, Flask, React, Node.js, JavaScript, HTML/CSS |
| • <b>Databases:</b> SQL Server, MongoDB, DynamoDB, Neo4J, HBase | • <b>Cloud &amp; DevOps:</b> Azure, Docker, GitHub Actions, CI/CD, Jira | • <b>AI/ML Tools:</b> PyTorch, FAISS, BM25, LSTMs, Neural Conversational Agents                                                                                                                       |

## 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  
• Refactored and optimized a full-stack AI counseling system (React + Flask) in an NIH-funded study with 40+ participants, improving modularity, performance, and scalability.  
• Integrated BM25 with FAISS vector search for hybrid retrieval, significantly improving context relevance and response accuracy in AI counseling sessions.
- LSTM Text Generator (PyTorch, NLP Project)** Jul 2025  
• **Implemented a word-level LSTM model** with embeddings, 2 stacked layers, and dropout, enabling accurate next-word prediction for text generation.  
• Achieved **>90% training accuracy within 50 epochs**, demonstrating strong model convergence and learning efficiency.  
• Developed a text generation pipeline capable of producing coherent narrative and poetic outputs from custom seed phrases.