VISHAL PATIL

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U.S. work-authorized Master's student at University of Maryland College Park, seeking a Summer 2026 internship.
Eligible for F1 CPT/OPT without requiring financial sponsorship for visa assistance from the employer.

EDUCATION

University of Maryland, College Park, *Master of Engineering, Software Engineering*　　　Jan 2025 - Dec 2026
Additionally, pursuing a *Graduate Certificate in Engineering - Artificial Intelligence*　　　GPA: 3.66 / 4.0

WORK EXPERIENCE

Division of Information Technology, UMD, College Park, MD [*AI Student Software Engineer*]　　　Oct 2025 - Present

- Refactoring code for the DocReview platform, **reducing code duplication by 70%** with **90%+ test coverage**.
- Developed an **AI-powered university chatbot** using **RAG** architecture with a scalable **GraphQL** pipeline to automate ingestion of university data.

Bank of New York, Pune, India [*Software Engineer I*]　　　Jul 2023 - Dec 2024

- Developed secure internal frontend tools and **Flask APIs** for investment accounting, resulting in a **38% increase in platform usage** and **48% faster response times**.
- Automated service account password rotations via **PowerShell** and **Ansible**, slashing execution time by **98%** (from 7 hours to 10 minutes) across enterprise systems.
- Remediated **60+ critical security vulnerabilities** to achieve an **A+ Veracode Safety Grade**.
- Collaborated in **Agile, cross-functional teams**, aligning technical solutions with business needs.

PricewaterhouseCoopers (PwC), Mumbai, India [*Technology Consultant Intern*]　　　May 2022 - Aug 2022

- Built scalable Data Lineage Models using a **1.9 million-record dataset** to enhance trust and traceability for enterprise analytics platforms.
- Integrated a **Neo4j Graph Database** with an **Angular frontend** to provide interactive, real-time visualization of complex data flows for compliance auditing.
- Collaborated with the Data Governance Team to **streamline data processes and compliance**.

PROJECTS

Phish Detection ML [Multimodal Deep Learning] [phish-detection-demo]　　　Sept 2025 - Dec 2025

- Developed a multimodal phishing detection system using **dual-tower CNNs** in **PyTorch**, achieving **98.99% validation accuracy** across 256-dim text and metadata features.
- Source Code: https://github.com/VishalPatil18/phish-detection-ml

DocuMind [LLM-based Application]　　　Jun 2025 - Aug 2025

- Built a document Q&A platform using **LangChain** and **RAG**, reducing irrelevant LLM outputs by **35%** through **optimized semantic search** and **custom embeddings**.
- Source Code: https://github.com/VishalPatil18/DocuMind

SKILLS

- **Languages:** Python, JavaScript, TypeScript, C++, Java (basic), SQL, Shell Scripting
- **Frameworks & Tools:** React.js, Next.js, Node.js, FastAPI, LangChain, RAG, MCP, Streamlit, Docker, Git
- **Cloud & Databases:** AWS, PostgreSQL, MySQL, MongoDB, Neo4j, Redis, Ansible Tower
- **Concepts:** System Design, RESTful API Design, Object-Oriented Programming, CI/CD, Unit Testing, Agile/Scrum

ACHIEVEMENTS

- **SIM Scholar**, Schindler Igniting Minds Scholarship *(Top 30 across India)* - Sponsored my Bachelor's of Technology degree at Veermata Jijabai Technological Institute　　　*Mumbai, Oct 2019*
- **Publicis Sapient Jumpstart 2022**, Selected through nationwide hackathon *(Top 200 of 28,000+)*　　　*Delhi, Jul 2022*