

Vishal Sunil Kumar

• vsunilkumar@umassd.edu • [linkedin.com/in/vishals2602](https://www.linkedin.com/in/vishals2602) • 425-478-6132
• designport.netlify.app • OPT/CPT Authorized

AI Engineer and UX Designer with 3+ years developing production-scale LLM applications and human-centered design systems. Delivered 25% user engagement increases across 10+ healthcare platforms through optimized RAG architectures and data-driven design methodologies. Proven expertise bridging technical AI implementation with intuitive user experiences.

Professional Experience

Corporate Engagement Prospect Analyst & Researcher

University of Massachusetts Dartmouth August 2024 – May 2025

- Engineered data analytics systems analyzing 25+ corporate partnerships, increasing sponsorship efficiency by 20%
- Developed automated reporting dashboards using Python and Tableau, improving stakeholder decision-making processes
- Processed 600+ user feedback submissions annually, streamlining workflows that saved 40 hours monthly in troubleshooting overhead

UX/UI Designer

Indegene September 2021 – August 2023

- Boosted user engagement by 25% across 10+ pharmaceutical and medical device platforms using AI-augmented design systems
- Architected scalable model serving infrastructure with FastAPI and Redis caching, supporting 3 healthcare data platforms with 99.9% uptime
- Reduced design-to-development handoff time by 30% implementing Agile workflows and automated CI/CD pipelines
- Mentored 3 junior designers while conducting 50+ user interviews, increasing team productivity by 20% and ensuring HIPAA compliance

Technical Skills

- Programming & Development:** Python, Java, C++, SQL, React, Next.js, Vue.js, Django, Node.js, REST APIs
- AI & Machine Learning:** Transformers, LLM Fine-tuning, RAG Systems, OpenAI API, Hugging Face, TensorFlow, PyTorch
- ML Operations & Evaluation:** RAGAS benchmarks, MLflow, Model Monitoring, A/B Testing
- Design & Visualization:** Figma, Adobe Creative Suite, Sketch, D3.js, Matplotlib, Seaborn, Wireframing
- Infrastructure & DevOps:** Docker, Kubernetes, AWS/GCP, FastAPI, CI/CD pipelines, Redis, SageMaker

Featured Projects

- F1 Monk - iOS Visa Assistant**
Comprehensive mobile application adopted by 200+ international students for visa compliance management. Integrated Google Cloud Dialogflow, xAI, and Grok API for natural language processing. Features automated deadline tracking, document management, and advisor scheduling with 95% user satisfaction rating.
- Adaptive Prompt Engineering Framework**
Developed reinforcement learning-based system improving LLM performance by 15% through dynamic prompt optimization. Built modular architecture with T5-based generator and hybrid RL/GA optimizer. Deployed on AWS SageMaker with auto-scaling, reducing inference costs by 30% across 5+ production environments.

Education

- Master of Science in Computer Science** | GPA: 3.5/4
University of Massachusetts Dartmouth May 2025
- Bachelor of Technology in Information Technology** | GPA: 8.1/10
Meenakshi Sundararajan Engineering College May 2021

Accomplishments

- Boosted user engagement by 30% as Social Media Chair for the Graduate Student Senate through creative campaigns.
- Mentored junior designers, improving team productivity and reducing project turnaround times by 20%.