

Vikas Reddy

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EDUCATION

Johns Hopkins University

Jan '25 – May '26

Master of Engineering in Computer Science

Relevant Coursework: Machine Learning, Deep Learning, Advanced Human-Computer Interaction: Research Methods

University of Maryland - College Park

Aug '21 – Dec '24

Bachelor of Science in Computer Science

Relevant Coursework: Object-Oriented Programming, Algorithms, Advanced Data Structures, Artificial Intelligence, Computer Vision, Data Science, Computer Architecture, Programming Handheld Systems, Web Application Development

WORK EXPERIENCE

UMD Computational Sociodynamics Lab

Aug '23 – Jan '25

Research Assistant

- Engineered a WebSocket server to track Bluesky posts, reposts, and likes using the AT Protocol, integrating NewsGuard ratings to evaluate the reliability of individual news sources shared on the platform.
- Developed a news credibility tool with Shiny for Python and PostgreSQL to visualize news reliability across the platform.
- Created and deployed a FastAPI application on RapidAPI to provide third-party access to the news reliability assessment tool.

VoicePing

May '23 – Aug '23

Natural Language Processing (NLP) Intern

- Fine-tuned OpenAI Whisper to enhance real-time speech-to-text transcription accuracy for Japanese and Vietnamese.
- Achieved significant accuracy improvements, achieving a word error rate of 6.97% for Japanese and 7.33% for Vietnamese.
- Conceptualized, designed, and developed a cutting-edge prototype web application utilizing FastAPI, Next.js, and Firebase.

Breakerspace Lab

Jan '23 – May '23

Research Assistant

- Created a web plugin for Mozilla Firefox to find data lost before the transactional period of a website's connection to a server.
- Built the plugin using the webRequest API and JavaScript to get detailed information on the TLS connection.
- Researched potential web security risks during the initial stages of the web connection to evaluate potential plugin features.

PROJECTS

mani.ai

Aug '24

Financial Chatbot

- Developed a financial chatbot with GPT-4o mini and Gemini API to assist with budgeting, investments, and financial planning.
- Built the conversational interface using Next.js and Tailwind CSS, with Supabase handling chat history storage and sharing.
- Gathered feedback through user testing with 20+ participants and implemented iterative improvements from their suggestions.

My-Fitterp-Pal

April '23

UMD Dining Hall Meal Planner Application

- Developed a meal planning app that generates daily meal plans based on students' fitness goals and dietary preferences.
- Implemented a user-friendly front-end interface using React.js and a robust back-end system using Node.js and Express.js.
- Presented the application to 1000+ attendees at the UMD Bitcamp Hackathon, showcasing the app's features and functionality.

ACTIVITIES

Google Developer Student Club | Operations Lead

Aug '21 – May '24

- Promote curiosity among 500+ registered undergraduate students by hosting hands-on workshops and project-building activities relating to innovative technologies like Git, Flutter, and Google Cloud Platform.
- Create an in-depth, full year curriculum and management plan that allows the club to be self-sustainable.

UMD Hack4Impact Club | Software Engineer

Sep '22 – May '23

- Worked in a team of student engineers, designers, activists, and humanitarians to build software for nonprofits.
- Developed a student tutoring management portal for RISE DC, a non-profit providing educational services to 300+ low-income youth in Washington, DC, using React.js, Typescript, and Firebase.

SKILLS

Programming Languages: Java, Python, C, JavaScript, Typescript, PHP, Dart, HTML/CSS, SQL

Frameworks/Services: AWS, Azure, GCP, Docker, Firebase, React.js, Next.js, Express.js, JUnit, Git, GitHub, Linux

Spoken Languages: English, Japanese, French, Telugu