

Madhav Khanal

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EDUCATION

Rollins College	Winter Park, FL
<i>Honors B.A. with Double Major in Computer Science & Mathematics, Data Analytics Minor (Sophomore)</i>	<i>Aug 2024 – May 2028</i>
<ul style="list-style-type: none">• Full-Ride Alfond Scholar (\$350k scholarship), First-Generation College Student, 4.0/4.0 GPA• International Physics Olympiad National Team Member (53rd IPhO, Japan)• Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming/Design, Proofs and Abstraction, Data Analytics, Database Systems, Advanced Web Development, Differential Equations, Mathematical Modelling, Linear Algebra, Artificial Intelligence, Computational Theory, Adversarial Machine Learning	
CodePath	Remote

<i>Technical Interview Prep, Web Development</i>	<i>2025</i>
<ul style="list-style-type: none">• Collaborated on intensive, project-based coursework with weekly labs and coding challenges.• Attended Emerging Engineers Summit connecting with industry leaders	

EXPERIENCE

Software Engineering Intern	May 2025 – Aug 2025
<i>Massey Services Inc.</i>	<i>Orlando, FL</i>
<ul style="list-style-type: none">• Shipped critical bug fixes in production cloud-based facilities management application serving 10,000+ daily active users• Designed and deployed full-stack customer referral rewards system using C# .NET, Angular, Azure, Microsoft SQL, processing \$20K+ monthly referrals from 1000+ customers and replacing 10+ hours of weekly manual credit entry• Collaborated with cross-functional teams using Agile methodology, Azure DevOps and CI/CD pipelines to deliver high-quality solutions	
Business Analytics Intern	May 2025 – Aug 2025
<i>Massey Services Inc.</i>	<i>Orlando, FL</i>
<ul style="list-style-type: none">• Analyzed operational datasets for 500+ locations using Python and SQL, developing data-driven solutions• Built automated reporting workflows using Python, reducing data processing time by 60% through efficient algorithms	
Machine Learning Engineer	Jan 2025 - May 2025
<i>VantixAI</i>	Remote
<ul style="list-style-type: none">• Built and deployed production-ready computer vision model achieving 90%+ accuracy using Python and TensorFlow• Developed full-stack research platform serving 100+ users with React frontend and Python backend• Created intelligent note-taking system with natural language processing, implementing RESTful APIs	
Software Engineering Intern	Jul 2023 - Jul 2024
<i>MeroSiksha eLearning App</i>	<i>Kathmandu, NPL</i>
<ul style="list-style-type: none">• Developed and deployed scalable REST APIs using Node.js and JavaScript to handle data from 10,000+ active users• Implemented machine learning recommendation system with Python and SQL, achieving 15% improvement in engagement	

PROJECTS

Telia Analytics – European Study Group with Industry ESGI Lithuania	Jun 2025
Python, SQL, Machine Learning, Data Analysis, LLM, GPU	<i>ESGI Palanga, Lithuania</i>
<ul style="list-style-type: none">• Selected and fully funded as sole undergraduate among 30+ PhD researchers from Oxford and global universities• Processed millions of telecom data points using LLMs and GPU; developed ML models increasing customer retention by 30%	
Finlit – NSA AI Hackathon Winner Demo	Aug 2024
Python, JavaScript, React, Flask, Machine Learning	<i>NSA AI Hack 2025</i>
<ul style="list-style-type: none">• Architected full-stack platform with AI portfolio, visa-compliant investing, and gamified education modules for immigrants• Won \$1000 prize and Momo VC mentorship for innovative immigrant-focused investing solutions	
Zero Panic in Movement (ZPM) – KnightHacks Pheratech Challenge Winner Demo	Oct 2025
ROS2, Arduino, Python, YOLOv8, Flutter, Flask, A* Pathfinding	<i>KnightHacks 2025</i>
<ul style="list-style-type: none">• Won \$2000 at ROS2 Autonomy Challenge ; built robot swarm using ROS2 nodes and Arduino for real-time emergency evacuation• Implemented YOLOv8 computer vision and swarm intelligence to detect humans/obstacles and dynamically map optimal exit routes	
CuraSyn+ Healthcare Platform Demo	Aug 2024
React, TypeScript, Python Flask, OpenCV, Gemini AI, MongoDB	<i>HackHarvard 2025</i>
<ul style="list-style-type: none">• Developed real-time stroke detection using OpenCV and AI symptom analysis with multilingual doctor matching (6+ languages)• Built speech-to-text live transcription with 8 production APIs; achieved WCAG 2.1 AA accessibility compliance	

TECHNICAL SKILLS

Languages: Java, JavaScript, Python, C++, C#, C, Go, HTML/CSS, SQL (PostgreSQL, SQLite), R

Frameworks: React, Node.js, Angular, Flask, .NET, FastAPI

Tools: Git, Docker, AWS, Azure, Linux, Agile Development, CI/CD, RESTful APIs

Libraries: TensorFlow, PyTorch, scikit-learn, OpenCV, NumPy, Matplotlib