

Madhav Khanal

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EDUCATION

Rollins College

Winter Park, FL

Honors B.A. with Double Major in Computer Science & Mathematics, Data Analytics Minor (Sophomore) Aug 2024 – May 2028

- **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

Technical Interview Prep, Web Development

2025

- 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

Massey Services Inc.

Orlando, FL

- 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

Massey Services Inc.

Orlando, FL

- 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

VantixAI

Remote

- 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

MeroSiksha eLearning App

Kathmandu, NPL

- 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

[ESGI Palanga, Lithuania](#)

- 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

[NSA AI Hack 2025](#)

- 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

[KnightHacks 2025](#)

- 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

[HackHarvard 2025](#)

- 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