Nyan Prakash

Washington D.C

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Education

University of Virginia

Charlottesville, Virginia

Expected May 2027

Bachelor of Science in Computer Science and Economics

• Relevant Coursework: Data Structures and Algorithms, Calculus 3, Discrete Mathematics and Theory

Northern Virginia Community College

Associate of Science in Engineering

• **GPA**: 3.9 of 4.0

Anandale, VA

August 2023 - May 2024

Skills

Programming Languages & Frameworks:

Tools & Platforms
Specializations

Java, Python, JavaScript, C#, TypeScript, React, Node.js, FastAPI, Django, Express.js, Unity Game Engine, Blender, Excel, and Google Cloud Platform, Raspberry PI, Arduino, AWS Machine Learning (TensorFlow, Keras, Scikit-learn), Mobile Development, Robotics

Experience

UVA Link Lab

Charlottesville, Virginia November 2024 - Present

Undergraduate Research Assistant
 Conducted data-driven trials to optimize urban roads for bike and e-scooter safety and accessibility

- Developing a simulation model for bike and e-scooter using Unity and C# controlled by a real-world bike
- · Evaluating existing micro-mobility studies to refine current research objectives

Pacific Northwest National Laboratory

Software Engineering Intern

Richland, Washington

May 2024 - August 2024

- Developed a website for the Department of Energy to allocate funding to National Security Initiatives
- Decreased bundle size by 50% by implementing React code-splitting to optimize the user experience
- Implemented 10+ backend functions using Microsoft's .NET Framework

AutoDog Falls Church, Virginia
Founder December 2023 - June 2024

- Developing a smart dog harness to boost efficiency of dog training using an Arduino
- Won 1st in Virgina and 3rd nationally in SkillsUSA Engineering Technology and Design
- Used Bluetooth Low Energy, radio communication and various sensors to create a working prototype.

Projects

EcoCoin Cambridge, Massachusetts

Decentralized Trading Platform for Emission Allowances (React, FastAPI, Google Firebase)

October 2024

March 2024

- Implemented blockchain-based tokenization for emission allowances.
- Created a predictive algorithm for future carbon credit prices.
- Developed stock trading and investing functionalities and a user-friendly web UI.

HealthScope
Geospatial AI-Driven Public Health Trends Analytics Platform (React, FastAPI, Pytorch)

Baltimore, Maryland September 2024

- Designed a machine learning model to predict and visualize public health trends.
- Built an interactive React-based dashboard for real-time data insights.
- Improved accuracy by integrating 9+ large-scale public health datasets.

DeepGuard Charlottesville, Virginia

Multi-modal AI Deepfake Detection System (Python, OpenAI, Google Chirp)

- Developed a multi-modal AI model for deepfake detection in text, voice, and video.
- Built a FastAPI-based backend to handle real-time deepfake detection requests

Activities & Awards

Global Research and Consulting Learning Finance and helping local non-profit with consulting needs **HackNYU** Won 2nd place in Best Fintech Hack at NYU for building an AI menu engineering **Johns Hopkins University Hackathon** Won 3rd place in Best use of Data at Hophacks for building Healthscope

February 2025 -Present February 2025 October 2024