# **Nathan Kumar**

Greater Chicago Area | (224)-575-2743 | nathankumar022@gmail.com

LinkedIn: /in/nathan-kumar-7a4aa8250/ | GitHub: /nkumar568

Motivated Computer Science and Math student with concentration in Machine Learning. Passionate about computer programming and artificial intelligence and all its capabilities. Ambitious, critical thinker, eager to tackle challenges and problem solve using technology. Quick learner, thrives in a hands-on learning environment. Bilingual, hardworking, and excited to join a dynamic team.

#### TECHNICAL SKILLS

- Programming Languages: Java | Python | R | C | C++ | Bash | x86 Assembly Language | JavaScript | TypeScript | GraphQL
- Tools: AWS Services | React Native | Next.js | Git Version Control | GitHub | Vim | Jupyter Notebook | Anvil

## **EDUCATION**

#### Purdue University, West Lafayette, Indiana | 3.24 GPA

August 2022 - May 2025

Bachelor of Science, Computer Science (Machine Intelligence concentration); Minor in Mathematics

• Relevant Coursework: Problem Solving and Object-Oriented Programming, Programming in C, Data Structures and Algorithms, Computer Architecture, Artificial Intelligence, Algorithms, Linear Algebra, Multivariable Calculus, Discrete Mathematics

#### **PROJECTS**

### Discord Bot | Python

Purdue Hacker Event | Developed a Discord bot to respond to emoji reactions using Python.

- Configured Discord Developer settings and programmed with a unique bot token.
- Utilized Replit to execute, generate OAuth2 URL, and manage bot permissions, server access, and status.
- Programmed the bot to respond instantly with a personalized message when a user reacts to any message with a thumbs up emoji.

#### Technological Marketplace | Java

- Created a client-server shopping system with GUIs, concurrency, and multi-threading.
- Implemented user authentication functionality to enable secure login for both sellers and customers.
- Enabled product listing, cart functionality, and marketplace filtering/sorting.

## **WORK EXPERIENCE**

## **Bridgecare Technologies** | Software Engineering Intern

May 2024 - August 2024

- Created a webhook function for JotForm URLs using JotForm API, enabling form submission handling with automated webhook management in a React Native application.
- Developed a function to capture and process JotForm submission payloads, integrating with AWS AppSync and GraphQL to store data in DynamoDB.
- Integrated Next.js API routes to create serverless functions that handle HTTP requests from external services, facilitating seamless data interaction between the React Native frontend and AWS backend.

#### CAS and Pistoia Alliance | Purdue Data Science Researcher

August 2023 - December 2023

- Curated datasets, highlighted correlations, and created visualizations for streamlined hazard identification.
- Enhanced Chemical Safety Library (CSL) with improved hazardous reaction profiles for safer laboratory environments.
- Implemented FAIR principles to establish a file naming convention for enhanced accessibility and reusability.
- Integrated PubChem's CAMEO Chemicals annotations, focusing on reactivity alerts to identify hazardous compounds.
- Used Python to generate summary graphs illustrating hazardous reaction patterns induced by various compounds.

#### ADDITIONAL EXPERIENCE AND ACTIVITIES

Purdue Kahaani | Performer and Team Manager

August 2022 - Present

Beta Chi Theta | Vice President of External Affairs

May 2024 - Present

Beta Chi Theta | Fraternity Rush Recruitment Chair

August 2023 - May 2024