## **Kushal Gautam**

Raleigh, North Carolina | kgautam@ncsu.edu | 919-798-2953 | linkedin.com/in/kushal-gautam-7b9859249 | Permanent Resident

#### **Education**

# North Carolina State University, Raleigh, NC

Bachelor of Science in Computer Science, Anticipated May 2027

Dean's List | GPA: 4.0/4.0

- Clubs: iOS Team App Development Club

## Panther Creek High School, Cary, NC

Graduated June 2024 | GPA: 4.0/4.0 (Unweighted), 4.67/5.0 (Weighted)

- Relevant Coursework Outside of School: Introduction to Python, Introduction to Java, Intermediate Coding for Medicine

### **Skills**

Languages: Python, Java, JavaScript, SQL, HTML, CSS

Frameworks/Libraries: Biopython, pandas, numPy, sklearn, pygame

Tools & Technologies: AWS, GitHub, Eclipse, PyCharm, CNN, Generative AI

### **Experience**

#### **Software Intern**

Accenture, Durham, NC

June 2023

- Boosted model efficiency by 45% by leading a 72-hour AWS DeepRacer project, coding reward functions for self-driving cars using Generative AI and Python.
- Increased team workflow as Scrum Master, following Agile methodologies to coordinate daily Scrum meetings and delegate tasks for on-time project completion.
- Enhanced model accuracy by 20% through 10+ hours of training, fine-tuning car navigation for optimal reward-based movement.

### **Projects**

# AI in Radiology - Pneumonia Detection

- Developed CNN model with 98% accuracy in Python for X-ray image analysis.
- Enhanced model precision using transfer learning and fine-tuning techniques, reducing diagnostic time by 14%.
- Improved pneumonia detection efficiency through optimized image processing

### Blackjack Card Game

- Programmed a Blackjack game in Java using object-oriented programming principles.
- Simulated game logic including card shuffling, dealing, and scoring mechanisms.
- Integrated a user-friendly GUI with Java Swing for an enhanced user experience.

## **Book Library Inventory System**

- Developed a library management system using Python and object-oriented programming.
- Implemented features for book addition, deletion, and inventory tracking.
- Utilized lists and dictionaries for efficient data handling.

## **Cryptography Using Substitution Cipher**

- Implemented encryption and decryption using substitution ciphers in Python.
- Enhanced understanding of cryptographic techniques and data security.

## Certifications

## PCAP<sup>TM</sup> – Certified Associate Python Programmer

SAS Certified Associate: Programming Fundamentals Using SAS 9.4