Rishi Pathak

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EDUCATION

GEORGIA TECH
BS in Computer Science
May 2023 | Atlanta, GA
College of Computing
Threads: SysArch and Intelligence
Overall GPA: 3.88 / 4.0
Major GPA: 4.0 / 4.0

BLUE VALLEY WEST
High School Diploma
May 2020 | Overland Park, Kansas
Summa Cum Laude
Weighted GPA: 4.87
Unweighted GPA: 4.0

LINKS

Instagram:// **rishi.pathak156**
Github:// **rpathak38**
LinkedIn:// **rishi-pathak-84312815a**

PROJECTS

COMPUTER SCIENCE
Simple Lane Detection
Simple lane detection algorithm in Python that implemented Canny Lane Detection and Hough Line Transform in order to calculate and display the suggested path for a car.

iHeard
Web app that classifies and identifies various sounds (drilling, dog barking, etc.) by means of a neural network written in PyTorch.
Website: https://iheard.tech/

ELECTRONICS
Raspberry PI Google Home
Implemented ideas from basic circuit design in order to create a cheap, open source version of a Google Home.

SKILLS

PROGRAMMING
Over 5000 lines:
Java • Python
Over 1000 lines:
C • Assembly
Familiar:
iOS • Android • LaTex

RESEARCH

KENDEDA BUILDING FOR INNOVATIVE SUSTAINABLE DESIGN
Secondary Investigator
Jun 2021 – Present | Atlanta, GA

- Developing an iOS based app that attempts to detect the **presence of invasive species** in pictures through the use of **convolutional neural networks**.
- Research was selected by the Kendeda Building Advisory Board for full funding on an as needed basis, with initial valuation of **$500**, as part of the micro-grant program at Georgia Tech.

GEORGIA TECH DEPARTMENT OF MATHEMATICS
Undergraduate Research Assistant
May 2020 – May 2021 | Atlanta, GA

- Worked under **Professor Heinrich Matzinger** to determine the true mortality rate of the first wave of the Coronavirus Pandemic.
- Used the **requests** and **requests-html** libraries to gather data from various governmental dashboards.
- Developed models using **matplotlib**, **numpy**, and **pandas** in order to extrapolate inferences about the mortailty rate within the general populous from scattered datapoints across the world.
- Used **sklearn** library to create machine learning algorithms and draw correlations between coronavirus mortality rate and age

EXPERIENCE

CODE THE UNIVERSE | Founder + Chairman
May 2020 - Sep 2020 | Overland Park, KS

- Founded a international level nonprofit involved in teaching more than 2,500 students across the world about the fundamentals of programming.
- Actively involved in the development and release of courses on more than 8 different programming languages.
- Developed and maintained server infrastructure through AWS cloud services and maintained a course registration bot written in Python.

AWARDS

Year	Level	Award
2021	Collegiate	Kendeda Micro Research Grant Awardee
2020	National	National Merit Scholarship Competition Winner
2020	State	Kansas Governor's Scholar
2020	National	National AP Scholar
2017	International	Think Award Finalist (FIRST Robotics World Championships)
2017	National	Motivate Award: 2nd place; (FIRST Robotics Super-Regional)