Manish Adhikari

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EDUCATION

Howard University   **May, 2025**

*B.S, **Computer Science**; Minors: **Economics and Mathematics**, GPA **4.0/4.0***

Washington, DC

Relevant Courses: Data Structures and Algorithms I, II and III; Database Systems; Calculus: I, II and III; Discrete Structures; Linear Algebra; Database Systems; Artificial Intelligence; Object-oriented programming, Probability and Statistics, Cybersecurity I

WORK EXPERIENCE

Center of Excellence in Housing and Urban Research and Policy   **May.2022 – Present**

Data Science Research Assistant   *Washington, DC*

- Leveraged Python libraries including **pandas, geopandas, scikit-learn, folium, and matplotlib** to execute comprehensive data analysis and visualization for major 3 housing projects, encompassing evaluations of the DC home purchase assistance program.
- Spearheaded data collection, transformation, and analysis to depict migration trends among homeless populations in New York City, revealing a **25%** increase over 5 years, and a strong correlation with the PM 2.5 pollution factor.
- Generated and refined more than **100** static and dynamic data visualizations such as maps, histograms, and bar plots, pivotal in informing research papers and facilitating more than a **30%** increase in effectiveness of data-driven policy-making.

College of Arts and Sciences, Howard University   **May 2022 - Present**

Web Developer   *Washington, DC*

- Directed front-end development as the lead designer for the website, employing Drupal, HTML, CSS, and JavaScript to optimize user experience and functionality, leading to a **15%** increase in monthly views.
- Lead the regular updates and maintenance efforts for the website, guaranteeing its relevance, and functionality,

Python and Data Science Instructor   **Summer 2023**

- Developed and delivered tailored curriculum encompassing Python fundamentals and introductory data science concepts to a cohort of 12 participants, improved their academic performance by **10%.**

TECHNICAL SKILLS AND PROJECTS

- **Skills:** Python, HTML, CSS, JavaScript, Git, C++, Java, R, MIPS, Lua, Linux, Django, Pandas, Geopandas, Matplotlib, Scikit-learn, folium, AWS (in view), React.js (in view), MySQL (in view), Overleaf

- **Projects:**
  - Designed and developed a Web3 marketplace for acquiring Outcome-based NFTs linked to real-world events; Employed decentralized NFT metadata storage on IPFS and optimized data retrieval via Subgraph/The Graph, alongside a user interface with React, Next.js, and MaterialUI. (Lionhack @ Columbia University)
  - Automated movie selection with an AI recommendation system (scikit-learn), using IMDB-scraped data (beautiful soup).
  - Discovered and graphed the network topology for Howard University using scapy, networkx and matplotlib.
  - Medication reminder for mom that uses Twilio app to send text when it's time for the medication and keep following up.
  - Python Automation Scripts: Instagram and Facebook content deletion, Stock price change detection, Free pizza detection for my initials, Laptop screen shrink prank, autosaves for games.

LEADERSHIP EXPERIENCE

Howard University Alternative Spring Break   **March 2023**

Team Leader   *Philadelphia, PA*

- Supervised a team of 23+ members in mentoring middle school students in two different schools in Philadelphia about college and careers. Coordinated a non-profit, As I plant this seed, for setting up public refrigerator, packaging and transporting food to provide meals to 100+ homeless individuals.

HONORS & AWARDS

- **Howard University Founders Scholarship:** Awarded a $26,000 scholarship for exceptional academic performance.
- **Google Capacity Fund Award:** Recipient of $2500 scholarship from the "Google Capacity Fund"
- **WINNER, Data for Good Hackathon. JP Morgan and Chase:** Developed a data-driven proposal for a non-profit, starting with today, to promote black wellness and liberation.