Arnav Pal

Germantown, MD | 240-316-5525 | arnavpal2003@gmail.com

EDUCATION

University of Maryland, College Park, MD Graduation date: May 2025
College of Computer, Mathematical and Natural Sciences
Robert H. Smith School of Business
Major: Bachelor of Science, Computer Science Minor: General Business
Linkedin: www.linkedin.com/in/arnav-pal-969350215 GitHub: https://github.com/arnavp13

TECHNICAL SKILLS

- **Programming Languages:** Java, JavaScript, Python, C, HTML, MATLAB, R, Ruby, Ocaml, Node.Js, CSS, SQL, MS Office
- **Relevant Courses:** Object Oriented Programming, Data Structures, and Algorithms, Computer Systems, Discrete Structures, Organization of Programming Languages, Introduction To MATLAB, Calculus I & II, Applied Probability and Statistics, Linear Algebra, Intro to Data Science, Web Application Development

CERTIFICATIONS

Amazon Web Services Certified Solution Architect - Associate

- Have a knowledge of designing and implementing scalable and cost-effective cloud solutions on the Amazon Web Services platform.
- Proficient in architecting highly available and secure infrastructure, leveraging various AWS services to meet diverse business needs. Skilled in optimizing application performance, cost management, and cloud best practices to drive operational efficiency

Amazon Web Services Certified Developer - Associate

- Possess in-depth knowledge of developing and maintaining applications on the Amazon Web Services platform.
- Proficient in writing code for serverless applications, leveraging AWS services to enhance application functionality and performance.
- Experienced in debugging and optimizing cloud applications, implementing CI/CD pipelines, and using AWS developer tools to streamline the development lifecycle.

TECHNICAL EXPERIENCE

Elaunchers | *Intern* **June 2022 – July 2023**

- Redesigned client websites using HTML; Jasmine/Karma used for testing
- Designed Excel Profit and Loss spreadsheets to manage and update the company's financial transactions
- Performed data cleaning via HubSpot to extend clientele network
- Utilized telemarketing to reach out to clients

PROJECT EXPERIENCE

Weather Web Application | *JavaScript*

- Implemented user authentication, real-time weather updates, and data retrieval based on city input using Express, MongoDB, and EJS templating
- Utilized body-parser middleware for form handling, configured environment variables with dotenv, and deployed with configurable port settings aswell as a hosting a static website through render
- Integrated MongoDB Atlas for scalable cloud database management, ensuring efficient data storage and retrieval for login credentials and weather data

Predictive Analysis of FAANG Companies | *Python*

- Developed a predictive model using Python and machine learning (Linear Regression) to forecast stock values and fiscal annual revenue for Meta, Amazon, Netflix, Apple, and Google from 2013 to 2024, achieving high accuracy as measured by MSE and R-squared scores
- Conducted extensive data analysis by collecting, cleaning, and visualizing historical financial data, utilizing tools like Pandas, NumPy, Matplotlib, and BeautifulSoup to uncover trends and growth patterns
- Provided actionable insights for investors and stakeholders through clear visualizations and comprehensive analysis, enabling informed decision-making based on predicted financial performance
- Hosted the results on Git Pages.

Blackjack | *Java*

- Performed operation on a random number generator to create and shuffle a deck on Eclipse
- Manipulated ENUMs to assign card suits and values
- Created a reader to perform complex operations to determine player and dealer card values
- Ensured system efficiency through the creation of JUnit tests

Online Test System | *Java*

- Programmed an exam generator to create different types of questions (true/false, multiple choice, and fill-in-blank questions), kept track of students who took the exams, and produced basic statistics for each student and the class
- Exhibited knowledge of OOP, serialization, interfaces, polymorphism, and hash maps
- Implemented a command line interpreter to output student's names, exams, and answers

AWS APAC Solutions Architecture virtual experience program on Forage | *AWS*

- Designed a simple and scalable hosting architecture based on Elastic Beanstalk for a client experiencing significant growth and slow response times.
- Described my proposed architecture in plain language ensuring my client understood how it works and how costs will be calculated for it.

UMD Smith Undergraduate Student Association, Bitcamp Hackathon, ACM-ICPC, FRC, UNICEF, Google Code Jam