Ankita Vilas Pimpalkar

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EDUCATION

George Washington University

Washington, DC, USA

Masters in Computer Science

Aug 2024 – Present

Coursework: Advanced Software Paradigms, Design and Analysis of Algorithms, Computer System Architecture, Software Engineering, Data Mining, Cloud Computing

Chandigarh University

Chandigarh, India

Bachelor of Engineering in Computer Science and Engineering

Aug 2016 – Aug 2020

Coursework: Data Structures and Algorithms, Programming in Java and Python, RDBMS, Analog and Digital Electronics, Big Data Analytics, Data Warehousing, Machine Learning, Artificial Intelligence, Discrete Mathematics, Operating Systems, Management Information System

PROFESSIONAL EXPERIENCE

AI/ML & Model-Based Systems Engineering Intern, George Washington University

Feb 2025 - Present

- Developing AI/ML-based applications for a Raspberry Pi-based sensor system, integrating NLP, deep learning, and computer
 vision for real-time sensor analysis and edge computing using TensorFlow, PyTorch, OpenCV, and Scikit-learn.
- Collaborating with **Prof. Eric Dano** to integrate **Siemens Model-Based Engineering** (MBE) tools such as System Modeling Workbench and Teamcenter, supporting structured system design and API development.

Full-Stack Developer, Stealth Startups - Alternative Structure Group, Friends-Square, Go-Scale

Aug 2022 - May 2024

- Led **technical roadmap development** and provided **strategic recommendations** on technology stacks for **scalability**. Built landing pages and **optimized databases** for Alternative Structure Group (fintech startup), improving **user engagement by 40%** and **reducing backend processing time by 30%**.
- Accomplished new features and **optimized backend functionality** for Friends-Square, a New Delhi-based psychology firm, improving system responsiveness by **35%** and enhancing overall user experience.
- Offered database solutions for Go-Scale's client, improving platform performance and boosting site traffic by 20%.

Programmer Analyst Trainee, Cognizant Technology Solutions, Pune, India

June 2021 – July 2022

- Deployed and maintained 150+ enterprise applications using PowerShell scripting, SCCM deployment, SCCM driver packaging, and Intune packaging, achieving a 75% deployment success rate.
- Automated silent installations using VB-Scripts and Batch-Scripts for applications such as Adobe Acrobat, Microsoft Office Suite, AutoCAD, and Citrix Receiver, reducing installation time by 50%.
- Managed large databases with over 10,000 records, improving data integrity by 70% and ensuring 60% system uptime.

Web Developer Intern, Root Kings, Pauni, India

Nov 2020 - May 2021

- Developed Superfan-App, a celebrity game-based social media platform, using JavaScript, Vue.js, and CSS, enhancing user experience and engagement.
- Optimized responsive web design and cross-browser compatibility, leading to higher user engagement.

PHP Developer Intern, Talent Anywhere Services, Pune, India

Aug 2020 – Nov 2020

- Designed and created **high-performance** platforms such as Gujarati Sahitya Forum and NS4ED using PHP and CodeIgniter, reducing load times by 40% and **enhancing** user engagement by **30%**.
- Executed critical features such as user authentication and content management systems, increasing platform security and usability by 25%.

Junior Java Developer Intern, Maxgen Technologies, Pune, India

Jan 2020 – Jun 2020

- Devised responsive web pages using Java, HTML, and CSS for BookMyMovie, increasing website **responsiveness** by 20%.
- Conducted code reviews and debugging, ensuring a 90% reduction in system errors and smooth platform operation.

PHP-Trainee, Centre for Development of Advanced Computing, Chandigarh, India

 $May\ 2018 - Jun\ 2018$

 Developed a PHP-based ticket booking system, optimizing SQL queries for high-efficiency data retrieval, completing the project 15% ahead of schedule.

SKILLS AND TECHNOLOGY

Languages: Java, Python, PHP, PowerShell Scripting, HTML, CSS, JavaScript, SQL

Databases & Frameworks: MongoDB, MySQL Workbench, CodeIgniter (PHP Framework), Vue.js

Data Science & Machine Learning: Data Analysis Libraries - Pandas, NumPy, Matplotlib; Machine Learning - Linear and Non-Linear Models, Random Forest, SVM, Neural Networks, Unsupervised Methods (Dimensionality Reduction, Clustering)

Development & Deployment Tools: Figma, Visual Studio Code, MS Office, SCCM, Intune, GitHub

Soft Skills & Leadership: Analytical Thinking, Cross-Functional Collaboration, Process Optimization, Strategic Planning, Decision-Making

PROJECTS

- Handwritten Character Recognition: Developed an AI-based HCR system using Neural Networks and Python, achieving 70% accuracy on a benchmark dataset.
- **Personal Assistant:** Engineered a standalone **NLP-driven** assistant enabling voice-activated task creation and scheduled event management, improving user automation and productivity by **40%** within the first quarter.