# Ayush Pratap Singh

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**Coding stats : Leetcode | HackerRank**

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**My Portfolio**

## SKILLS SUMMARY

**Languages:** C++, Java, Python, JavaScript
**Frameworks:** React JS, Next JS, Tailwind CSS
**DBMS:** SQL
**Dev-Ops:** Docker, Git, GitHub, AWS EC2
**Tools:** Tableau, Microsoft Excel, Virtual Box, VMWARE
**Soft Skills:** Agility, Fast Learning, Adaptive, Project Management, Collaboration, Leadership

## PROJECTS

**Plant Disease Detection:**                                                                                                           **GitHub**

*Domain: Data Science & Machine Learning | Technologies: Python*

- Designed a machine learning model to identify and classify diseases in potato crops, resulting in the detection of **over 90% of disease cases** within an average time frame of under **three minutes per sample.**
- Optimized a custom ML model to achieve **87% prediction accuracy**, showcasing significant accuracy improvements.
- Presented at **Smart India Hackathon 2023**, where it was recognized and awarded for advancing the vision of an **'Innovating India'**.

**Personal Portfolio**                                                                                                                   **GitHub**

*Domain: Front-End Development | Technologies: HTML, Tailwind CSS, JavaScript*

- Developed a **responsive portfolio website** featuring **15+ advanced animations** and interactive elements to showcase projects, achieving **average session durations exceeding 3 minutes**, surpassing industry benchmarks.
- Integrated **Matter.js physics engine** to create visually engaging animations, enhancing user experience and interactivity.
- Refined website performance and responsiveness, ensuring cross-browser compatibility and achieving an **92% performance score** on Lighthouse audits.

**Custom Shell:**                                                                                                                       **GitHub**

*Domain: System Programming | Technologies: C++*

- Designed a **shell in C++** with support for **3 core commands** (cd, pwd, and echo), ensuring **100% POSIX** standards compliance.
- Enhanced command execution efficiency by **15%** by implementing **composed argument parsing** for escape sequences and quotes, **reducing processing overhead**.
- **Integrated file system navigation and I/O redirection**, enabling **500+ file operations** and seamless execution of **external programs**, improving system versatility.

**Pixel Dev Website:**                                                                                                                  **GitHub**

*Domain: Web Solutions | Technologies: Next.js, Tailwind CSS*

- Created a cutting-edge **web solutions platform** using **Next.js** and **Tailwind CSS**, delivering responsive designs with **90% Lighthouse performance scores**.
- Engineered over **10 interactive features** and animations, boosting user engagement to an average of **4+ minutes per session** across devices.
- Simplified for **SEO, accessibility**, and **cross-browser compatibility**, ensuring consistent, high-quality experiences for all users.

## ACHIEVEMENTS

- **Participated in the Smart India Hackathon and received recognition for the innovative crop disease detection tool.**
- **Achieved certification in Cloud Computing from IIT Kharagpur via NPTEL, securing an impressive 77%.**

## CERTIFICATIONS

- Cloud Computing – **IIT KHARAGPUR**
- ChatGPT Advanced Data Analysis - **Vanderbilt University**
- Prompt Engineering for ChatGPT - **Vanderbilt University**

## EDUCATION

**Lovely Professional University**                                                                                                      Punjab, India
*Bachelor of Technology - Computer Science and Engineering; CGPA: 8.79*                          Since - September 2022

**Narayana Public School**                                                                                      Gonda, Uttar Pradesh, India
*Intermediate – Science; Percentage: 83.8 %*                                                                       April 2019 - March 2021