VAIBHAV RAJ SAHNI

vaibhavsahniji@gmail.com | +918882357873 | Vaibhav-Raj-Sahni (LinkedIn)

EXPERIENCE

Software Engineer — July 2023-Present
Wells Fargo — *Bangalore, India*

- Developed **5 stable, production-grade automation** projects with integrated **VB.NET and C# scripting**, following **agile** methodologies, which eliminated **1,500+ hours** of manual effort annually, enhanced efficiency, and mitigated risks, leading to **$1.2 million in cost savings per year.**
- **Led Development** of **Credit Cards Automation** Project, which automated data processing tasks end-to-end, including **UI automation tasks** and handling of XML-based inputs, cutting processing time by **75%** and reducing manual effort by **90%**.
- Built a high-performance **Records Retention** bot in both **UiPath and Python**, leveraging **multiprocessing** in Python to scan **Shared Drives and SharePoint** sites, boosting speed by **60%** and enabling automated, policy-driven file deletion at scale.

Software Development Intern — June 2022-July 2022
Wells Fargo — *Bangalore, India*

- Devised **machine learning-based algorithms** to automate **investment suggestions** and **portfolio rebalancing** for 2,000+ mutual fund profiles, enhancing investment **decision accuracy** by **45%**.
- Generated and integrated **frontend and backend APIs** for an **Investment Tool**, facilitating seamless tracking, SIP calculations, and portfolio analysis, targeting 10,000+ users for **automated financial planning**.

Summer Intern — June 2021-July 2021
Compass Group India — *Gurugram, India*

- Optimized SQL queries in **BigQuery (GCP)**, leading to a **50% improvement** in data processing speed and enhancing **data analytics** capabilities for real-time analytics on **1M+ data points**.
- Contributed to **'Lighthouse'**, a remote monitoring project hosted on **Google Cloud Platform**, delivering **business analytics insights** reducing incident resolution time by **30%**, improving operational efficiency.

PROJECTS

Augmented Reality Sudoku Solver

- Created a **real-time AR-based Sudoku solver** using **computer vision** (OpenCV) and **deep learning** (CNN, YOLO) to detect, classify, and solve puzzles from live video streams.
- Achieved **99% accuracy** in **digit classification**, significantly improving processing speed over traditional methods like Hough Transform and area-based detection.

Hate Speech Detection using Multimodal Meme Analysis

- Built a **lightweight model** for detecting hateful memes by integrating visual (**ResNet**-based) and textual (**BERT**-based) cues, enhancing feature extraction through **object tagging** and **image captioning**.
- Attained **78% accuracy** in content moderation using optimized classification models (**SVM, Gradient Boosted Decision Trees**), outperforming industry benchmarks of **60% accuracy** in similar tasks.

HyperFace: A Deep Multitask Learning Framework

- Executed a **deep learning model** for **multitask face analysis**, including face detection, landmark localization (21 points), pose estimation, and gender classification.
- Trained a **CNN-based model (AlexNet)** on 7,000 images for 100 epochs, achieving **93% accuracy** using **feature fusion** and **selective search** for enhanced facial recognition.

Heart Disease Prediction

- Developed a heart disease prediction model using data mining and machine learning (**Naïve Bayes, Decision Tree, Random Forest, KNN**), addressing a global issue affecting **17.9M+ lives annually.**
- Secured **90% accuracy** in classifying heart disease attributes, leveraging advanced predictive analytics to transform medical data into actionable insights.

EDUCATION

Delhi Technological University (CGPA - 9.23) — Delhi, India
Bachelor of Technology in Computer Science Engineering, Minor in Machine Learning — *2019-2023*
Coursework: Data Structures & Algorithms (DSA), Object Oriented Programming (OOP), Operating Systems, Compiler Design, Computer Networks, Computer Vision, Machine Learning, Artificial Intelligence

SKILLS AND ACHIEVEMENTS

- **Languages**: C, C++, Python, JavaScript, SQL, Java, HTML, CSS
- **Tools/Frameworks**: UiPath,Node.js,Express.js,React,jQuery,Unity,REST API,Git,Jenkins,CI/CD
- Received **Team Spotlight Award** at Wells Fargo for saving **$500,000+** for the company annually
- Completed **Microsoft Azure AZ-900** Certification

EXTRA-CURRICULAR

Google Crowdsource Influencer: Organized, hosted web development sessions with 200+ participants
General Secretary, IOSD-DTU: Organized, hosted and judged events like Codefeed, AlgoFeed, SIGs
Publicity Head, INNOVA-DTU: Managed publicity, recruited and directly led a team of 10
PR Head, ENGIFEST-DTU: Invited participation from various colleges, coordinated event organization