VIVEK V PAI

Ph No: +91 8618691497

E-mail ID: paivivek002@gmail.com

OBJECTIVE:

I aim to secure a position that allows me to utilize my skills effectively for the company's success, while also seeking a challenging environment that fosters continuous learning and personal growth.

Education Qualification

Qualification	Institution	Board	Year of passing	CGPA
MS in computer science	Liverpool John Moores University	Liverpool John Moores University	2024	
EXICUTIVE PG PROGRAM in software development	International Institute of Information Technology, Bangalore	International Institute of Information Technology, Bangalore	2023	7.5
BE in Information science and engineering	Don Bosco institution of technology	Visvesvaraya Technological University	2022	8.24

SKILLS:

With a clear and logical mindset, I approach problem solving pragmatically and am driven to view challenges in a competitive light.

Programming Languages: JavaScript, TypeScript, Python, Java, C, C++, HTML, CSS, SCSS, SQL, PHP.

Frameworks: Angular, React, Bootstrap, Flask, Spring Framework.

Tools: ChatGPT, Google Bard Docker, Nodejs, Xaamp, git, bash, Postman.

IDEs: VsCode, IntelliJ, PyCharm, Jupiter notebook, Google IDX, eclipse, Turbo C.

Designing Tools: Canva, Figma, adobe Photo shop.

Speaking Skills: English, Hindi, Kannada, Konkani (mother tongue).

Professional Details:

Currently working in MetricDust as software development Engineer.

3 years of experience on software product and various technologies like web development, app development and AI ML.

Timeline of experiences:

- **MetricDust** as **Software development engineer** – (July 2022 - current)

  Working as a software development engineer and developed and designed 5+ web applications which also includes dashboards to manage selling and buying properties tickets, booking of court and websites of companies which are developed in angular technology. Also worked on Mobile apps in react technology. Currently working on a networking project which where I am developing a interface through which user can manage and manipulate the switches and ports also configure them according. Also developing a "AI Chatbot" which can understand user text messages and perform the desired operations.

  Client: **Shopprop**

  Shopprop is an US based real estate company that provides the buying and selling services. Worked here as a senior developer in building the official website of Shopprop through which the listings can be searched based on various parameters such as location, property status, property types etc. Also, built a dashboard that can be used by the users and agents.

  Client: **Stordis**

  Stordis, a leading provider of high-performance networking solutions, trusts our expertise for tailored IT solutions. Our longstanding partnership, rooted in innovation and customer-centricity, ensures Stordis receives cutting-edge services. With strategic locations in Germany, the UK, and Poland, we offer Stordis comprehensive support for their networking needs across EMEA. Their services are from consultancy to integration and support, are finely tuned to meet Stordis's requirements. Stordis benefits from our certified trainings and customized network tool development, optimizing their infrastructure seamlessly.

  Technologies user: Angular, React, AWS, Postman, Python, ChatGPT apis and models, NodeJS, git.

- **MetricDust** as **Project Intern** – 8 months (October 2021 – June 2022)

  Worked as a project intern in MetrcDust where I built Dashboard and website for a product called MetricRealties which helps the agents and broker in real-estate domain to host their own customize site with the help of AI in no time and also provides them a fully functional dashboard with various tools and options to boost their revenue. Handled the design and development of the dashboard and also the integration of them. Fixed the bugs and maintained the product.

  Technologies used: Angular, Typescript, bootstrap, AWS, Postman.
  Skilt Learned: Development and designing, Communication, Team work, Time management.

- **Let's Grow More** as **web developer Intern** – 1 months (Sept 2021 – Oct 2021)

  I honed my skills in HTML, CSS, JS, and React JS. Throughout this experience, I successfully developed two websites as part of project tasks. These projects not only allowed me to apply theoretical knowledge but also provided hands-on experience in web development. Completing the internship has equipped me with practical skills and a deeper understanding of front-end technologies.

  Technologies used: React JS, JavaScript, bootstrap, HTML, CSS.

- **Sparks Foundation** as **Intern** – 2 months (Aug 2021 – Sep 2021)

  During my internship at Sparks Foundation, I spearheaded website development projects for a Barrique Hotel, implementing features tailored to their specific needs. Notably, I successfully integrated a secure payment gateway into the website, ensuring seamless transactions for customers. This experience allowed me to refine my skills in web development and payment gateway integration, while also gaining valuable insights into client requirements and project management within a professional environment.

  Technologies used: JavaScript, HTML, CSS, PayPal API, Payment gateway.

- **Prinston Smart engineering** as **Machine learning Intern** – 2 months (Mar 2021 – Apr 2021)

  During my internship in machine learning, I engaged in cutting-edge projects aimed at implementing advanced algorithms for data analysis and predictive modeling.

Collaborating closely with senior researchers, I gained hands-on experience in data preprocessing, model development, and evaluation techniques. Additionally, I contributed to the creation of innovative solutions for real-world problems, further deepening my understanding of machine learning principles. Through this internship, I not only expanded my technical skills but also developed a keen insight into the practical applications of machine learning in diverse domains.

Technologies used: Python, Jupiter notebook.

Project Details:

Professional Projects

- ORCASK – Stordis - currently working

ORCASK is an AI chat bot which can turn the user text message format to the operations in the dashboard. For example: if a user wants the list of ethernet which are enables he can directly ask the chat boat to give all the list of interfaces. In same way if he needs to enable any one of the ethernet port he can communicate that in the chat bot to enable the ethernetport123 and the AI will do it job
This will reduce the technical brier of the user and can perform all the operations in a single screen. One of the benefits of using AI is the NLP where user can simply talk with the bot and get his work done.
We have used OpenAI's ChatGPT Api for the processing of the messages or texts given by the user and to get the desired token to match that with the API to perform.
One of the advantages of using ChatGPT model is even user misspells the words or typing error in the message it can even understand it or if not gives feedback that it had error in understanding it.
We have trained the ChatGPT model with LLMS so that we can make the model fit to the networking domain and fit for over use case

Contributions:

- Designed the UI UX of the chatbot window and developed the screen
- Integrated the Apis with the AI to perform the tasks and also handled the error case and security.
- Sanity testing and training the model with the prompts for better performance and more accuracy and making the model fit.

Technology used: React, JavaScript, Python, ChatGPT Apis, Jupiter notebook, Postman.

- ORCA – Stordis - currently working

  ORCA is a web based react app where the user can manage his switches and devices using this dashboard. User can discover the devices using the IP of the device and once it is connected, he can manage the Interfaces, Vlans, Port channels, Port groups, members etc.
  User need to login to the dashboard with the credentials and need to discover the device with the IP of the devices which he needs to manage and manipulate. Once discovery is done user will get options to change the configuration of the devices which includes the operations like enabling disabling of interfaces, adding port channels, port groups, changing the speed of the port channels and ethernet ports and etc. This will help the user with a simpler and understandable interface to perform required operations and also help better usage of the devices.
  User will also get to see the logs on the log panel with proper messaging of success and error cases with color coding with the process time, time of action. The request or action can be seen and in failure or error case the cause of error is also visible which help user to alter the request again
  The dashboard in built with React technology with JavaScript language. Has authentication with token system for security. All the Apis for request are authenticated with the tokens.

  Contributions:
  - Designed the layout of the dashboard
  - Integrated the authentication system for security and tokens for every Api call
  - Log panel view for better understanding of the operations performed by the user with pagination and proper status, error messages and color coding. Also, with clear log option
  - Sanity testing of the dashboard and bug fixes

  Technologies used: React, JavaScript, Python, Postman, Django, HTML, CSS, Jupiter notebook.

- MetricRealties - MetricDust

  An end-to-end software infrastructure through which any real estate agent can build their own website within 10minutes including a website, dashboards with ticketing system, user management etc. A templatised website is deployed through which users can search for a property in a particular place that is available for sale. Multiple filters were implemented that enabled the user to filter based on parameters such as number of bedrooms, number of bathrooms, sqft area, property type, property status.

These data were fetched from the MLS servers, which are staged to query the data in intervals. The users could choose to favourite any properties that they like for any future references.
Login screen was provided in which a native login/signup option was provided. Also, Login with google was also implemented so that the users could login to the website using google authentication. Multiple options were given for easing the experience of a buyer like 'Write an offer as guest' through which the user could place an offer for a property he likes, without login. A similar option was given for the sellers to list their property without logging in. A virtual tour was displayed for certain properties for which the tours existed. Through this, the user can experience the home and the surroundings virtually. Similar options were provided in the mobile app that is supported for android/iOS so that the users can view properties and buy through their mobile devices.
Google maps were integrated in both the web and mobile application versions that show the points where the properties are located for easy understanding of the locality.
The main aim of this product was to make the website building for a real-estate agent easier and get the advantage of digital dashboard for both user and agent to manage the tickets in a secured and easier way which helps agent to boost the productivity and helps user with easy and simple interface.

Contributions:

- Designed and developed the console dashboard where a agent or broker can register his tenant and can develop his websites with customization like his own logo, colors for website, details for website i.e, home page details, about us, team, Services etc. and select the predesigned template and publish.
- Integrated the authentication for the security of the dashboard.
- Designed and developed the dynamic forms where used can use that to develop the customized website and fields

Technology used: Angular, TypeScript, JavaScript, HTML, SCSS, Postman, Bash script, AWS

- Flat user dashboard – MetricRealties

The user dashboard for tenants is a comprehensive platform designed to facilitate property transactions with security and convenience at the forefront. To ensure data integrity and user safety, robust security authentication mechanisms are implemented, allowing users to register securely via email/password or Google sign-in.
Upon registration, users gain access to a user-friendly interface where they can manage their transactions seamlessly. The dashboard provides a centralized hub for users to create tickets for buying or selling properties. Users can track all their

transactions in a tabular format, with a dedicated favourites tab for easy access to preferred properties.
For property searches, users can utilize Google address search or manually input addresses to create requests, selecting request types as needed. Once created, users can engage in conversations with agents, receiving frequent updates and status notifications within the conversation page.
A notifications tab ensures users stay informed about important updates related to their tickets. The transaction page offers a wealth of information, including conversations, documents, contacts, tools, next steps, and research. Users can access documents, upload required files, and attach them to conversations for easy reference.
The tools section provides insightful data such as price trend graphs and school ratings, aiding users in making informed decisions. Additionally, users can view property-related posts from agents and make notes in the research tab for future reference.
The next steps section guides users through the ticket process, highlighting upcoming steps they need to take. Overall, the user dashboard offers a seamless and intuitive experience, empowering users with the tools and information they need to navigate property transactions effectively.

Contributions:

- Designed and developed the version 2 of dashboard which includes, architecture of the dashboard, UI / UX of the dashboard
- Integration of the Apis like authentication, conversation, ticket creation etc.
- Worked on making the dashboard into micro frontends using module federation
- Used lazy loading for the better performance of the browser and reduce the loading time.
- Increased the overall performance and experience of the dashboard.
- Handling the clients call to understand the requirements and weekly demo to client with updates
- Bug fixes and maintenance of the dashboard.
- Wrote the deploy script to deploy the site and make it public available and dump the code to AWS cloud

Technology used: Angular, TypeScript, JavaScript, HTML, SCSS, Postman, Bash script, AWS

- S3 optimization – Metricrealties.

S3, a cornerstone of AWS cloud infrastructure, serves as a storage repository for all site or product-related data. Metric Realities leverages AWS S3 to store property data, including crucial images. However, challenges arose due to storage constraints and billing concerns, particularly with the abundance of high-resolution images.

Addressing this, we optimized image storage by implementing compression techniques and employing thumbnail generation to reduce data size without compromising quality. These measures not only mitigated storage and billing issues but also enhanced data accessibility and cost efficiency for Metric Realities.

Contribution:

- Wrote 3 python scripts to optimize the data in S3 and DynamoDB and also reduce the data.
- Script no 1 is to delete the properties in S3 and DynamoDB by comparing the data from the MLS databases which helped in clearing junk data.
- Script no 2 is to delete the 6 months old data from S3 and DynamoDB which will keep only the useable data and reduce the bill and increase the storage capacity.
- Script no 3 is to and event listener which will compress the images and save in S3 every time when a property gets soled which will further help to reduce the data and bill due to frequent updates in the S3 this will benefit to maintain the storage capacity.
- Overall, mainly focused to reduce the bill and optimize the storage space.

  Technology used: Python, Jupiter Notebook, AWS LaMDA functions, Terraforms, Bash scripts

- Nets and turf – MetricDust

Nets and Turf Dashboard is a comprehensive administrative tool designed to streamline the management of court bookings for sports facilities, offering intuitive drag-and-drop functionality and advanced features for efficient control.
Upon logging in, the admin is greeted with a visually appealing dashboard displaying an overview of current bookings and court availability. The dashboard provides a user-friendly interface, allowing the admin to effortlessly navigate through various functionalities.
The core feature of the dashboard is the interactive booking management system. Admins can view bookings made by users in a queue format, with each booking represented by a draggable card. By simply dragging and dropping these cards onto the corresponding court table, the admin can instantly assign bookings to specific courts. As the admin performs this action, a timer starts, indicating the duration of the booking. The card displaying the booking details dynamically updates to show the remaining time, ensuring real-time visibility for both the admin and users.
Additionally, the dashboard offers a comprehensive booking history feature, allowing admins to access past bookings, review details, and even add bookings manually if needed. The system also supports group bookings, enabling the admin to efficiently manage multiple bookings for events or tournaments.
For court management, the dashboard provides a dedicated page where admins can enable or disable individual courts as needed. This functionality ensures optimal utilization of facilities while allowing flexibility for maintenance or special events.

Nets and Turf offers a user-friendly mobile app for easy sports facility bookings. Users can effortlessly select courts and time slots, with real-time availability updates. The app supports individual and group bookings, allowing users to add additional participants. Instant confirmations and booking history tracking streamline the user experience. Integration with the administrative dashboard ensures seamless management of bookings in real-time. With its intuitive interface, Nets and Turf mobile app redefines convenience and flexibility in sports facility booking.

Contributions:

- Design and developed overall architecture of the dashboard and mobile app.
- Integration of the Apis and handled the authentication.
- Timer management and drag and drop functionality to maintain the board or table which helps in user management and overall booking of the user and manage the courts
- Court management where admin can enable or disable the court during maintenance.
- User friendly mobile app through which user can book slot for a game and book the court.

Technology used: React, JavaScript, HTML, CSS, Postman, Bash scripts

- Web builder – MetricRealties

Introducing Web Builder, a revolutionary project designed to empower users to effortlessly create their own customized websites with ease. With Web Builder, users have the freedom to craft their ideal website layout by simply dragging and dropping essential elements such as "About Us," "Top Banner," "Agent Details," "Teams," and "Testimonials" onto the canvas.

The intuitive interface allows users to preview their website in real-time within an adjacent tab, providing instant feedback on their design choices. Additionally, users can rearrange elements by simply dragging them up or down, ensuring full control over the layout.

Web Builder also offers seamless editing capabilities, allowing users to make on-the-go modifications with just a click. Whether it's updating text, uploading images, or customizing button links, users can effortlessly tailor their website to their preferences.

Once satisfied with their design, users can easily publish their site with the click of a button, making their creation accessible to the world. Moreover, Web Builder allows users to add pages and customize page names, enabling them to create a cohesive website structure tailored to their needs.

In essence, Web Builder revolutionizes the website creation process by offering a user-friendly platform where creativity knows no bounds. Whether you're a novice or

an experienced web designer, Web Builder empowers you to bring your vision to life with simplicity and sophistication.
Furthermore, Web Builder goes beyond mere customization by offering advanced functionality to enhance user experience
In addition to its extensive customization features, Web Builder offers users the flexibility to change templates and colors to suit their preferences. With a selection of three professionally designed templates, users can easily switch between layouts to find the perfect fit for their website. Moreover, users can customize the color scheme to match their branding or personal style, ensuring a cohesive and visually appealing design. Furthermore, Web Builder allows users to upload their logo and input basic details such as business name, contact information, and social media links, enabling them to create a unique and personalized online presence effortlessly. With these customization options, users can truly make their website their own, reflecting their brand identity and vision with ease.

Contributions:

- Design and developed the overall architecture including the UI UX of the website
- Implemented the template which will support the site built using the builder and also added that for preview
- Functionalities to customize the site which includes color, images, texts, page name, links etc.

Technology used: Angular, TypeScript, JavaScript, HTML, SCSS, Postman, Bash script, AWS

Personal and Freelancing project.

- EasyQ Solutions and Technologies – Development consultant - Freelancing

Client: EasyQ Solutions and Technologies Private Limited is dedicated to simplifying compliance with quality management systems (QMS) for the medical device industry. Services offered by Solutions and Technologies are Specializing in aligning QMS with stringent international standards such as ISO 13485, 21 CFR Part 820, MDSAP, ISO 14971, IEC 62304, and IEC 62366, EasyQ ensures that clients meet regulatory requirements with precision and efficiency.
EasyQ's expertise goes beyond mere compliance, aiming to streamline processes, improve operational efficiency, and elevate quality standards for medical device companies. By offering tailored solutions and comprehensive support, EasyQ enables clients to navigate the complexities of regulatory frameworks with confidence and success.

EasyQ's unwavering commitment to QMS excellence and regulatory compliance within the medical device industry.

Contributions:

- Design and developed the overall architecture of the website
- Converted the Figma design to the webpages using angular technologies
- Worked on cloud infrastructure to deploy and maintain the code in AWS.
- Developed spring boot Apis for communication between front end and backend.

Technology used: Angular, TypeScript, JavaScript, HTML, SCSS, Java, Spring boot, Swager, Bash script, AWS

- "Smart Surveillance System using IOT" – Final year project

The Smart Surveillance System developed for Visvesvaraya Technological University represents a significant advancement in security technology. By leveraging IoT and advanced AI techniques, the system offers real-time anomaly detection and monitoring capabilities, bolstering security across various environments. Key features such as face, motion, and fire detection are seamlessly integrated, utilizing algorithms like Haar cascade and LBP classifier to interpret surveillance data effectively.

A notable aspect of the project is its innovative approach, which combines IoT with AI to create a proactive security solution. By autonomously identifying and classifying suspicious activities, the system provides timely alerts to authorities, enhancing public safety and property protection. This proactive stance sets the system apart, ensuring a swift response to potential threats and mitigating security risks effectively.

Looking ahead, the system holds significant potential for further advancements and scalability. Future iterations could include the integration of new classifiers to improve accuracy and optimize power consumption. Additionally, the inclusion of a GSM module could enable direct mobile updates, expanding the system's reach and utility. With its flexible design and forward-thinking approach, the Smart Surveillance System is poised to evolve and adapt to emerging security challenges, cementing its role as a cornerstone of modern security infrastructure.

Technologies used: Raspberry PI, Python (3.8.2), OpenCV, imutils, stmplib, Flask HTML, CSS

- AUTOMATED LUNG CANCER DETECTION USING MACHINE LEARNING – Personal Project

  The project aimed to develop a machine learning-based system for precise lung cancer detection from CT scans, with a primary focus on enhancing early diagnosis and treatment outcomes. Employing a multi-stage methodology encompassing pre-processing, feature extraction, and classification, various algorithms including Random Forest, SVM, ANN, and CNN were utilized. Of these, CNN emerged as the most effective, achieving remarkable accuracy rates, thus highlighting its potential in medical imaging analysis.

  Through rigorous experimentation, the system demonstrated significant potential in improving the efficiency and reliability of lung cancer detection. By leveraging advanced machine learning techniques, particularly CNN, the project contributes to the advancement of medical research and patient care. Ultimately, the success of this endeavor holds promise for revolutionizing the landscape of lung cancer diagnosis, offering hope for better treatment outcomes and improved quality of life for patients.

  Technologies used: Python, flask, Jupiter notebook, google collab, Angular, Postman.

- Guest lecture – Part time – (Dec 2023 – March 2024)

  During my tenure as a guest lecturer at Don Bosco Institute of Technology, I had the opportunity to impart knowledge on Angular to students, guiding them through a comprehensive curriculum comprising 12 university-prescribed programs. Additionally, I conducted a workshop focusing on practical application, where students learned to develop a simple project integrating Angular, PHP, and SQL. The workshop included hands-on sessions on creating a robust authentication system, enabling users to sign up, log in, and perform basic CRUD operations, thereby providing them with invaluable practical experience in software development. Through these initiatives, I aimed to empower students with the necessary skills and expertise to excel in the dynamic field of web development.

  Skill learned:
  As a teacher, I developed skills in effective communication, curriculum development, and fostering student engagement.

- Team-leader – DBISIL – (Dec 2020 – Jun 2022)

  As the team leader for the Web Development team at DBISEL Innovation Lab, I took the initiative to organize and conduct workshops aimed at empowering team members with essential skills in PHP, SQL, HTML, and CSS. These workshops provided hands-on learning opportunities, allowing team members to gain practical experience and proficiency in web development technologies. Additionally, I delivered informative talks on Git and GitHub, imparting valuable knowledge on version control and collaborative development practices.

  Furthermore, I provided guidance on hosting websites on free domains, emphasizing cost-effective solutions for deploying web projects. By sharing insights and practical expertise in these areas, I fostered a collaborative learning environment within the team, enabling members to enhance their skills and contribute effectively to innovative web development projects.

  Skills learned:
  As a speaker, I developed skills in effective communication, presentation delivery, audience engagement, and topic expertise.

PERSONAL DETAILS:

NAME: VIVEK V PAI

DOB: 20 January 2000

LANGUAGES KNOWN: English, Konkani, Hindi and Kannada,

NATIONALITY: INDIAN

HOBBIES: Designing (WEB/APPS), Painting, Pencil shading and Sports (Volleyball)

DECLARATION:

I, hereby declare that the above-mentioned details about me are true to the best of my knowledge. If not, I bear the responsibility of my mistakes and am answerable to the authority.

Vivek V Pai
