

Vedant Tilwani

Creative Full-Stack Developer

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Fueled by **3+ years** of experience crafting user-centric web experiences with React, Python and Three.js. I excel at building visually stunning and efficient applications. I'm eager to leverage my skills to foster innovation and user delight.

WORK EXPERIENCE

Aruba Networking, a Hewlett Packard Enterprise Company – FullStack Developer II Feb 2021 – Present

- **Enhanced Search Efficiency** (40% user satisfaction increase):
 - Designed and implemented a **high-volume search bar** leveraging *Python, Elasticsearch, React, Docker, and Kubernetes*.
 - Processes over **9,000+ monthly queries**, delivering user device information, relevant in-page navigation, and summarized documentation with citations using **Large Language Models (LLMs)**.
- **Streamlined Client Authentication** (First in Industry):
 - Developed a Captive Portal for seamless **client authentication** within Aruba Central using *React* and *Typescript*
 - Strategically executed and **optimized data flows** for enhanced **user authentication** and access control functions across various cloud providers (Google Azure, AWS and Okta).
- **Optimized Infrastructure Performance** (25% improvement, 12% cost reduction):
 - Led the migration of containerized applications from **x86 to ARM** processors, utilizing *Docker* and *Kubernetes*.

Clouddesign – Backend Intern 2019

- **Slack Attendance Bot**: Developed an **Attendance Bot on Slack**, streamlining attendance, tracking and managing the process for the team using *Python*.
- **Reports and Analytics**: Utilized the **ELK Stack** to **automate** the generation of **visually enriched reports and analytics** for the client, enhancing visualization and **streamlining data processing** using *Elasticsearch* and *Python*.

PERSONAL PROJECTS

Befriendly ([link](#)) – Flutter, Dart, Pocketbase, Firestore 2024

- Designed and Developed a **cross-platform mobile application** with secure **user authentication**, optimized **search** (*Pocketbase*), real-time **video call** and **chat** functionality (*Firebase*) for fostering connections.
- Ensured app stability and user engagement through **performance monitoring** (*Crashlytics*) and **push notifications**.

Satellite Tracker ([link](#)) – Javascript, Three.js 2023

- Leveraged **Three.js** to develop a sophisticated **satellite tracker** application, rendering **real-time satellite positions** based on Two-Line Element Sets (TLEs) and the *satellite.js* library.
- Achieved a smooth **60FPS rendering** experience, ensuring seamless visualization, and implemented **interactive tooltips** with satellite name display on hover, enhancing user experience.

Data Structures Exploration: A* Pathfinding and Sudoku Solver ([link](#)) – Python, Numpy, Matplotlib 2020

- Demonstrated proficiency in data structures by implementing the **A* pathfinding algorithm** and **Sudoku solver** using a **backtracking algorithm**.

EDUCATION

Manipal Institute of Technology, Manipal 2017-2021

B.Tech — Computer Science Engineering & Big Data and Reinforcement Learning (Minor) 8.06

SKILLS

Technical Skills: Python, Postgres SQL, Elasticsearch, Typescript, Javascript, React, Redux, ThreeJS, Flutter, Dart, HTML, CSS