VAIBHAV OBEROI

BACKEND DEVELOPER | PYTHON DEVELOPER

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PROFESSIONAL EXPERIENCE

Ekyam.ai Nov 2025 – Present

Software Development Engineer - 2

- Architected and developing **EKYAM Core V2** (**Python FastAPI**) end-to-end, creating robust integration pipelines to sync products, orders, purchase orders, transfer orders and other entities between major retail systems (e.g. NetSuite ↔ Shopify).
- Developing AI-ready ETL and transformation pipelines, standardizing diverse retail data (SKU variants, seasonal catalogs, omni-channel orders, inventory levels) into Ekyam's canonical ontology to enable instant cross-system analytics and automated operations.

Lobb Logistics, Bangalore, Karnataka April 2024 – Sep 2025

Software Development Engineer

- Developed **Lobb Care Control Tower** on top of **FastAPI** which assists the management in quick resolution of priority tickets allocated across diverse teams including administration, finance, sales and operations. The solution resulted in a reduction of ticket resolution time by **56%**.
- Developed **Heuristic View** for showcasing some critical key metrics of various truckers and transporters affiliated with Lobb such as pending payable/receivable amount, trucks owned, common routes, trips done, user comments etc, leading to a **34%** increase in logistical efficiency.

Xlscout, Mohali, Punjab August 2022 – Feb 2024

Software Product Developer – 2

- Steered the development of **Novelty LLM** which is the upgraded version of Novelty Checker by leveraging the open-sourced **ParaEmbed** embedding model fine-tuned on patent and technology data in collaboration with **Hugging Face,** resulting in **40%** better result quality.
- Developed **Drafting LLM** on top of **Django** utilizing **Large Language Models** and **Generative AI** which makes automated patent drafting **43%** faster and efficient, integrated **image to text Vision AI**, implemented encryption and decryption mechanisms using **Fernet** algorithm to secure client's data.
- Fostered the development of **Usage Global Counter** module on top of **Flask** which monitors the utilization of all modules of Xlscout**.** The module helped the marketing team in optimizing their marketing strategies and increasing their client conversion rate by **37%.**

Software Product Developer - 1

- Accelerated the development and integration of the following features in Ideacue: Idea Generation leveraging **GPT-3.5** and **GPT-4** models, draft independent claims, check novelty, and merge concepts, resulting in **44%** increase in submitted ideas.
- Orchestrated the implementation of **Ideacue Dashboard** within Novelty Checker, enhanced research productivity by **22%,** empowering researchers with valuable insights and **novel idea exploration**.
- Pioneered the deployment of advanced features in Novelty Checker including search within automated results, bucketing, manual patent addition, report and patent summary generation, resulting **35%** reduction in research time.
- Devised and executed **equal priority** logic in Novelty Checker using **celery**, ensuring unbiased user experience and fostering inclusivity, resulted in a **27%** increase in user engagement and strengthened product loyalty.
- Led the end-to-end development of **Novelty Checker** on top of **FastAPI** framework in **Python**, leading to a substantial **64%** growth in client base and revenue by delivering a cutting-edge solution for patent idea novelty assessment through **key feature mapping**.

39k Group, Gurugram, Haryana January 2022 – June 2022

Software Development Engineering Intern - Python

- Written python scripts for seamless retrieval of **high frequency trading data** from **6** prominent exchanges, leveraging **Rest APIs** and **Websockets** for fetching data, and storing in **PostgreSQL** database.
- Optimized the latency by **50%** which ensured **2 times** faster order execution speed.
- Architected a highly interactive frontend using **React.js**, asynchronously rendering real time updates of Deribit order books and open orders, leading to optimization of trading efficiency by **24%,** enhancing responsiveness and enabling faster decision making.
- Built a robust frontend on top of **HTML**, **CSS**, **JavaScript**, which renders the log messages of **4** production dynos running on **Heroku**.

SKILLS

- **Programming Languages:** Python, JavaScript
- **Web Development:** HTML, CSS, React.js
- **Python Frameworks**: Django, Flask, FastAPI
- **Python Libraries**: Pandas, Numpy, Matplotlib, Requests, Beautiful Soup, Tensorflow, Keras, Scrapy etc
- **Database**: MongoDB, MySQL, PostgreSQL, Flyway (DB migration tool)
- **API Development:** Rest APIs, Websockets
- **Version Control**: Git, Github, Github Actions, BitBucket
- **Containerization Tools**: Docker
- **Computer Vision**: OpenCV, Image Processing
- **Cloud**: Google Cloud, Amazon AWS

CODING PROJECTS

Sudoku Solver GitHub YouTube January 2021 – February 2021

- Developed a highly efficient Sudoku Solver Web Application by integrating a **recursive backtracking algorithm** to solve a diverse collection of **19000** sudoku samples within an impressive **1-second** timeframe.
- Trained a highly accurate, customized deep learning model to recognize sudoku digits, delivering an exceptional accuracy of **98.1%** on the **Keras MNIST** dataset.

Space Invaders Game GitHub YouTube June 2020 – September 2020

- Engineered a captivating Space Invaders Game in python, incorporating the **turtle module** for visually stunning graphics and engaging gameplay, while seamlessly integrating **OpenCV object detection** and **tracking** for an immersive gaming experience, achieving an outstanding **97%** detection accuracy.
- Automated and smoothly tracked the game's movement with the green cap of a highlighter leveraging **PyAutoGUI module** with **96%** automation accuracy.

ACHIEVEMENTS

- Honored with the renowned **Employee of the Quarter** award from Xlscout for the development of remarkable and impactful solutions that enhanced Novelty Checker's accuracy by **30%** and reduced time consumption by **25%**. **Link: Quarterly Award.**
- Solved **400+** problems on **LeetCode** and completed **June Daily Leetcoding Challenge**, maintaining **40** days streak.
- Drove hands-on exploration of **Google Cloud Platform (GCP)** as part of the prestigious **GoogleCloudReady** Facilitator Program, completed **30** quests and earned **15** skill badges, mastered cloud technologies for scalable and efficient software solutions. **Link: Qwiklabs.**
- Qualified Gate exam in 6th semester with All India Rank **7421**.
- Scored **1613** out of **1800 (89.6 %)** in the highly regarded TCS NQT September 2021.

EDUCATION

AKTU University, Lucknow, Uttar Pradesh September 2018 – July 2022
Bachelor's of Technology in Computer Science
Aggregate Percentage: 84%