# Dikshant Vats

Bachelor of Technology
Indian Institute Of Technology, Ropar

+91-9873380339
dikshantwats@gmail.com
https://github.com/eikxiaou
https://www.linkedin.com/in/dikshant-vats-a14255184/

## EDUCATION

| Degree | Institute/Board | CGPA/Percentage | Year |
|---|---|---|---|
| Bachelor of Technology | Indian Institute of Technology, Ropar | 7.69 | 2018-2022 |
| Senior Secondary | Central Board of Secondary Education | 85.2% | 2017 |
| Secondary | Central Board of Secondary Education | 10 | 2015 |

## EXPERIENCE

- **Quantile Analytics** *June 2022 - Present*
  *Quantitative Developer* Indore
  - Spearheaded collaborative efforts with the Head of Analytics, Head of Technology, and Senior Quants from a **mid-size quantitative hedge fund (AUM > \$4B)** for the development of end-to-end analytics products aligned with key **business objectives**. Incorporated **Agile and Waterfall methodologies** for efficient **project management**.
  - Pioneered the construction and orchestration of a **dynamic, stateless Python library** crucial for **Trading & Portfolio Analysis** facilitating:
    * **Portfolio related Calculator functions and precision-enhancing modifications** for **Portfolio Risk**, **Portfolio Performance**,**P&L** ,**Market Impact quantification**, and comprehensive **VaR calculations** reducing **20%** time taken to generate reports.
  - Development of **Full-stack Analytics** products using **python-flask** package and **AngularJS** to gain informational insights on **Portfolio Risk, Return, Factor breakdown, P&L attribution, Market Impact**.It encompasses **Long/Short/Total/Group (L/S/T/G) synopsis** and **Time Series reports**.
  - Engineered a **Data API Framework** akin to Bloomberg, addressing critical issues and introducing new capabilities, including:
    * Streamlining the need for specific APIs (microservices) by designing versatile functions catering to needs such as **single data points, time series, and data snapshots**.
    * **Significantly reducing time-to-market** for new data sets from various vendors in form of **SQL, NoSQL databases, pickle, HDF5** by **80%**, ensuring **rapid** availability to developers and researchers.
  - Partnered with the **futures research team** to build a **fullstack data management** application for visualizing and managing futures tickers, rolling policies, configurations, and historical data.
  - Developed a **Batch Utility** package to streamline batch processing, enhance developer support, ensure data integrity, and facilitate quick resolution of process failures.
  - **Mentored** two interns, overseeing their **successful integration**, **project assistance** for building full stack apps and gathering **SEC Data for 10-K, 10-Q, SC-13 fillings, Alternate research Data**, and **skill development** within the team..
  - Exposure: **Python, SQL, MongoDb, Javascript, AngularJS, Bloomberg, Databricks, Pyspark**

## INTERNSHIP

- **Altair** *June 2021 - December 2021*
  *SDE Intern* Bengaluru
  - Designed and developed a C++ prototype for a TCL command parser used in Hyperworks. Proficiently utilized **C++ string libraries**, **stacks**, **vectors**, and **regular expressions** to implement parsing functionalities.
  - Formulated a **comprehensive framework** for efficient set creation, expanded support for **new features, functionalities**, and contributed to **API development** for part-related operations in Hyperworks.
  - Exposure:**C++,OOPS,Data Structures and Algorithms**

## PROJECTS

- **Faculty Leave Management System** *Mar 2021 - May 2021*
  *Guided by Dr. Viswanath Gunturi* **Github**
  - Championed the creation of a **Full Stack** Solution for Management of faculty information based on database system, that had individual login, password, dashboard, and could process different kind of leave applications based on the position of an individual.
  - It facilitated access for over **200 faculty members**, resulting in a **30% reduction** in leave processing time. Used **PostgreSQL** to build **Relational Database**, **Django** to connect it with back-end of Faculty Portal and crafted the front-end of the portal using **HTML/CSS**.
- **Blog Page** *Website*
  *Personal Project* **Github**
  - Crafted a **Responsive** Web Blog page where user can post blogs , recieve content via email that other persons wants to post and can swtich to different pages i.e blog page , contact page, and about page.
  - Utilized **Postgress** to store the Blog Entries,employed **Flask** to build a server and connect it to the database.

## TECHNICAL SKILLS

- **Programming Languages**: C/Cpp, Python, Javascript, SQL
- **Python Libraries**:Pandas, Numpy, Scikitlearn, Matplotlib, Seaborn

## KEY COURSES TAKEN

- **CSE ,Maths & Others**:Introduction to Programming, Data structures and Algorithms, DBMS , Probability and Statistics , Differential Equations , Linear Algebra, Calculus Applied Machine Learning , Economics, Professional Ethics, Industrial Management

## POSITIONS OF RESPONSIBILITY

- **PR Head - Core Team**, Zeitgeist, IIT Ropar *Febraury 2021 - April 2021*
- **Co-Ordinator**, Computer Integrated Manufacturing Club, IIT Ropar *August 2019 - August 2020*
- **Event Head**, Zeitgeist, IIT Ropar *August 2019 - October 2019*

## MISCELLANEOUS

- **Finalist**, Solar Decathlon India *2020-2021*
- **Winner**, IIT Ropar Cricket Championship *2018*
- **Volunteer**,Masakkali *Febraury 2020 - June 2022*