

# Vandit Patel

3rd Year Computer Engineer | Software Developer

226 - 505 - 4505  
/In/VanditPatel  
/GitHub/VanditPatel1  
patel.vandit1@gmail.com

---

## Skills

**Core Languages:** Python, C & C++, Scala, Matlab, SQL, ARM Assembly, R, Bash, JS

**Database and Servers:** PostgreSQL, MySQL, Apache2, SQLAlchemy, Redis, RabbitMQ

**Frameworks and Cloud:** AWS, Kubernetes, Docker, Celery, Airflow, Flask, Django, Sagemaker

---

## Work Experience

### Asana | Data Infrastructure Engineering Intern

// May - Aug 2019

- Developed Asana's first machine learning framework with Sagemaker, Airflow and Kubernetes
- Designed system to reindex Redshift tables for high performance queries while minimizing disk space
- Implemented open source Jupyter notebook viewer to allow for easier data science collaboration

### OPTrust | Investment Data Engineering Intern

// Sept - Dec 2018

- Orchestrated complex pipelines through Apache Airflow to provide overnight analysis for the firm
- Integrated a reconciliation system to map data streams from Bloomberg, HFS Financial and Eagle
- Designed dynamic parsers to analysis multiple portfolio hierarchies through one central system

### Acerta Analytics | Software Engineering Intern

// Jan - April 2018

- Developed REST API to monitor and submit large-scale data processing jobs to internal platform
- Implement a hot storage structure in S3 to improve the Data Science teams analysis times by 20%
- Integrated pipelines to preprocess and analyze terabytes of data from multiple automotive plants

### Conrad Centre | Software Engineering / BETs Intern

// May - Aug 2017

- Integrated a distributed task queue to handle time-consuming workloads on separate processes
- Developed raw data management scripts using pandas to train natural language processing algorithm

### Open Source and Entrepreneurship

// 2016 - Current

- Developed Asana hook for Apache Airflow to add a native Asana API interface for pipelines
- Launching service to mine "hype culture" sites and provide realtime updates on product launches

---

## Passion Projects

### Cybitrage (Arbitrage Generator) | Python-Pandas-Flask-JS-React

- Arbitrage opportunities discovered from over 16 real-time currencies with conversion rates
- Custom implementation of Bellman-Ford algorithm to spot opportunities with returns over 2 %

### NHL Player Heat Maps | Python-Plotly-Azure-PostgreSQL

- Analyzed individual player shots over the full hockey season to determine the variety of goals scored
- Developed scripts to mine the NHL API and preprocess in-game data to produce player aggregates

---

## Education

### University of Waterloo | Bachelor of Computer Engineering

// 2016 - Current

- University of Waterloo President Scholarship of Distinction

### Stanford University | Machine Learning Course

// 2018