

# Vandit Patel

3rd Year Computer Engineer | Software Developer

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## 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, Flask, Django, Airflow, Celery, Flower

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## Work Experience

**Asana | Data Infrastructure Engineering Intern** // May - Aug 2019

- Productionized machine learning models to predict customer churn and analyze 1.2 terabytes of data
- Designed system to reindex hundreds of Redshift tables while minimizing disk space by over 35%
- Implemented autoscaling Jupyter notebook viewer on Kubernetes for sensitive analytics sharing

**OPTrust | Data Engineering Intern - Investments Team** // Sept - Dec 2018

- Orchestrated over 10 pipelines through Apache Airflow to provide overnight analysis for traders
- Integrated system to map data streams from Bloomberg, HFS Financial and two more providers
- Designed dynamic parsers to analyze 100s of portfolio hierarchies through one central system

**Acerta Analytics | Software Engineering Intern** // Jan - April 2018

- Developed API with Flask to monitor and submit large-scale data processing jobs to internal platform
- Implemented a hot storage structure in S3 to improve the Data Science teams analysis times by 20%
- Integrated pipelines to preprocess and analyze 2.5 terabytes of data from multiple automotive plants

**Conrad Centre | Software Engineering Intern** // May - Aug 2017

- Integrated a distributed task queue to handle time-consuming workloads on separate processes
- Mined 1000s of email and text conversation data sets to train customer service NLP chatbot

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## Passion Projects

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

- Arbitrage opportunities discovered from over 16 currencies with real-time 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 100s of in-game data to analyze players

**Hype Culture Site Mining | Python-Scrapy-Pandas-Celery**

- Launched service to mine “hype culture” sites and provide realtime updates on product launches
- Provided live Slack channel updates to buy new product releases quickly and resell for a profit

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## Education

**University of Waterloo | Bachelor of Computer Engineering** // 2016 - Current

- University of Waterloo President Scholarship of Distinction

**Stanford University | Machine Learning Course** // 2018