

# VIGNESH NATARAJAN

705-978-5294 | [vikky33.nv@gmail.com](mailto:vikky33.nv@gmail.com) | [linkedin.com/in/vicky-vn](https://linkedin.com/in/vicky-vn) | [github.com/vicky-vn](https://github.com/vicky-vn)

## PROFILE SUMMARY

AWS Certified Data Engineer Associate with 3+ years of experience at a Fortune 500 company in backend development, now focused on building scalable data pipelines and automation solutions. [4x Azure Certified](#).

## TECHNICAL SKILLS

**Programming Languages:** Python, SQL, Java, C#, JavaScript

**Libraries & Frameworks:** Pandas, NumPy, FastAPI, Flask, Streamlit

**ETL Workflow Orchestration:** Airflow, dbt

**Databases:** PostgreSQL, MS SQL Server, MongoDB

**Cloud & DevOps:** AWS, Microsoft Azure (DevOps, Data Studio), Docker, Git, GitHub

**Others:** DBeaver, SSMS, Jupyter Notebooks, Selenium, JIRA, ServiceNow

## PROFESSIONAL EXPERIENCE

### Data Engineer Intern

May 2025 – Aug 2025

*University of Windsor, ON*

- Extracted data from external public APIs using Python and automated the ETL process with Pandas for downstream analysis
- Transformed raw data into clean, structured DataFrames and loaded them into internal systems for dashboard consumption
- Built interactive dashboards in Streamlit to visualize operational metrics and trends
- Improved data pipeline performance and usability by optimizing transformation logic and modularizing code for maintainability

### Software Engineer (Data)

Jul 2020 – Apr 2023

*Cognizant - Chennai, India*

- Designed and optimized complex SQL stored procedures to streamline data access, serving 200K+ users
- Developed robust REST APIs for a learning platform and created reusable helper functions by following best practices
- Developed and optimized stored procedures to improve response time up to 2ms through query optimization and indexing
- Cleaned and standardized master data across multiple tables to ensure consistency and improve reporting accuracy by 30%
- Developed Python scripts to parse and split large XML data dumps (100MB+), enabling efficient ingestion and handoff to the DevOps team for deployment

### Intern

Feb 2020 – Jun 2020

*Cognizant - Chennai, India*

- Developed and deployed a SaaS training solution to streamline new hire onboarding, improving process efficiency by 10%
- Created backend scripts to analyze large datasets, enabling actionable business insights
- Implemented dynamic data binding in Angular to enhance user interface responsiveness and maintainability
- Assisted in debugging and fixing UI issues to improve user experience and interface stability

## EDUCATION

### Master of Applied Computing

May 2024 – Aug 2025

*University of Windsor — Windsor, ON*

### Bachelor of Technology in Computer Science and Engineering

Jul 2016 – Jun 2020

*SRM Institute of Science and Technology — Chennai, India*

## PERSONAL PROJECTS

### [CryptoXtract](#) | Real-time ETL pipeline powered by modern data stack for cryptocurrency market intelligence

- Built production-ready ETL pipeline using Python, PostgreSQL, and Docker processing cryptocurrency market data with automated extraction from external API every 6 hours
- Implemented comprehensive data transformation pipeline using dbt for creating analytics-ready datasets from raw API data
- Designed containerized data warehouse with proper schema optimization handling complex financial data types, error handling

### [FilterIt](#) | Python based web app powered by AI and ML to prevent data leakage

- Integrated two-factor authentication (2FA) using a Google Authenticator-style approach, enhancing login security and eliminating the need for traditional passwords
- Integrated OpenAI API to generate detailed patient record summaries from various formats, enhancing data accessibility
- Utilized SpaCy to detect and redact sensitive information from patient records, preventing data leakage before sending it to ChatGPT for summarization