

ROBERT JEAN PIERRE

Metuchen, NJ | 732-604-4867 | robertjp@live.com
[linkedin.com/in/rpmjp](https://www.linkedin.com/in/rpmjp) | github.com/rpmjp | robertjeanpierre.com

Computer Science M.S. candidate at NJIT (3.9 GPA) with a research focus on deep learning and transformer architectures for computer vision. Seven years of prior experience at Verizon leading a 50-person team across North and Central New Jersey, building reporting and analytics in SQL, Python, and Power BI. Comfortable moving between applied ML work, production-style data pipelines on Hadoop and AWS, and end-to-end software projects in Java and Python.

EXPERIENCE

Graduate Researcher, Deep Learning · New Jersey Institute of Technology

Newark, NJ

Sep 2025 – Present

- Building Swin Transformer-based models for image classification, running ablation studies on window size, patch merging, and attention head configurations.
- Trained and benchmarked over 300 neural networks on an RTX 4090 for a study on generalization bounds, testing whether Rademacher complexity predicts the generalization gap in practice.
- Found that classical capacity measures showed no statistically significant correlation with empirical generalization ($r = -0.12$), while margin-based analysis was more informative.
- Presented findings in a recorded project defense; documentation and experiment code maintained in version control for reproducibility.

Marketing Manager · Verizon Fios

North and Central New Jersey

2013 – 2020

- Managed a 50-person sales team across Hoboken, Jersey City, Newark, Harrison, Union, Bayonne, and New Brunswick, covering most of the North and Central Jersey Fios footprint.
- Built weekly and monthly performance dashboards in Power BI and Excel pulling from internal SQL databases, replacing manual reports that had previously taken the team several hours each week.
- Wrote Python and SQL scripts to clean, join, and segment customer and sales data, which surfaced underperforming territories and informed how reps were assigned and coached.
- Ran territory-level analysis to identify high-potential zip codes and adjusted field coverage accordingly, which the regional leadership used as input to quarterly planning.
- Promoted from the core sales support role to an independent contractor role with expanded responsibility covering New York territory in addition to New Jersey.
- Trained new reps on reporting tools and CRM workflows, and served as the go-to person on the team for anything involving data, dashboards, or ad-hoc analysis.

EDUCATION

M.S. in Computer Science · New Jersey Institute of Technology

GPA: 3.9 / 4.0 · Dean's List (all semesters) · *Relevant coursework:* Advanced Machine Learning, Deep Learning, Big Data, Data Structures and Algorithms, Operating Systems, Database Systems, Java Programming

Jan 2025 – May 2026 (expected)

B.S. in Computer Science · Rutgers University

Dean's List (all semesters)

2022 – 2024

PROJECTS

Generalization Bounds in Deep Networks

PyTorch, NumPy, RTX 4090

- Empirical study across 300+ trained models comparing Rademacher complexity, VC-style capacity proxies, and margin distributions as predictors of the test-train generalization gap.
- Found that networks with orders of magnitude more parameters than logistic regression still generalized better on the same tasks, contradicting the classical capacity-based story.

Online Retail II – Big Data Pipeline

AWS EMR, Hadoop, Pig, Hive

- Loaded and processed the UCI Online Retail II dataset on an EMR cluster, using Pig and Hive to answer questions about customer cohorts, product mix, and country-level revenue.
- Wrote the dataset introduction and analysis writeup for the project milestone, covering data quality issues, schema, and preprocessing choices.

DC Crime Analysis and Prediction

Python, scikit-learn, pandas

- Personal applied ML project using open DC crime data to build predictive models for incident type given location and time features, with exploratory analysis in pandas and matplotlib.

Algorithm Visualizer Portfolio

HTML, CSS, JavaScript

- Built an interactive site with sorting and pathfinding visualizers, a projects page, and a contact page. Written as separate CSS/JS files per page rather than a single bundle.

TECHNICAL SKILLS

Languages: Python, Java, SQL, JavaScript, HTML/CSS

Machine Learning: PyTorch, scikit-learn, NumPy, pandas, Transformers (Swin, ViT), classical ML, generalization theory

Data & Big Data: Hadoop, Apache Hive, Apache Pig, HBase, AWS EMR, Power BI, Excel (advanced)

Web & Systems: Java Servlets, JSP, Apache Tomcat, JavaFX, Git, Linux, concurrency and multithreading