# David A. Pogrebitskiy

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#### **EDUCATION**

Northeastern University, Khoury College of Computer Sciences, Boston, MA Candidate for Bachelor of Science in Data Science. Mathematics Minor **GPA:** 3.97/4.00 Expected May 2024

Relevant Coursework: Machine Learning 1, Data Visualization, Large-Scale Storage & Retrieval, Foundations of Data Science, Mathematics of Machine Learning, Linear Algebra, Multi-variable Calculus, Probability & Statistics

#### TECHNICAL SKILLS

Languages: Python, C++, SQL, Java, HTML, JavaScript

Libraries/Frameworks: pandas, NumPy, Scikit-learn, Tensorflow, Plotly, Flask, PySpark, D3.js

Databases: MySQL, MongoDB, Elasticsearch, Airflow, Kafka, Redis, Neo4j, HDFS, Spark

#### **EXPERIENCE**

# **Automated Execution Analyst Co-op**

Jul 2023 - Jan 2024

TD Cowen / TD Securities

New York, NY

- Utilized Python to create FIX Protocol message translators, enhancing in-house analytics capabilities and meeting client-specific requirements
- Developed a Plotly dashboard to enhance the interpretability of quantitative trading signals and facilitate analysis of order routing technology
- Produced monthly market reports for clients from intraday quote and trade data, employing Dremio and SQL for efficient data acquisition and analysis, ensuring timely and accurate distribution to clients

#### **Data Science Teaching Assistant**

Jan 2022 - Jun 2023

Khoury College of Computer Sciences

Boston, MA

- Conducted weekly office hours, offering personalized guidance to students in data science concepts
- Provided constructive feedback on assignments, improving learning outcomes and overall student performance

#### **Data Engineering Intern**

Jun 2022 - Aug 2022

Space CAMP

Colorado Springs, CO

- Designed and implemented data streams and current-state tables in Apache Kafka using KSQL to deliver reliable and accurate satellite and mission status updates to satellite operators
- Developed an API in Python for transforming table or stream output from Kafka into JSON format, enabling interaction between Python and Kafka for developers

#### **PROJECTS**

**DaveML**  $\mid C++, Linear Algebra, Python$ 

Nov 2022

- Implemented ETL module and various regression techniques (linear, ridge, and logistic) using C++ and principles of Linear Algebra and Calculus, such as QR Factorization, Gradient Descent, and cost functions
- Enclosed functionality into a Python module using PyBind11 to enable users with easy experimentation

### **ReceipTrack** | Python, OpenCV, PyTesseract, Plotly

Nov 2022

• Developed a Python module with OpenCV and PyTesseract to parse and extract information from images of receipts to aid in the analysis of spending behavior and personal finances

# **ACTIVITIES**

**Director of Technical Workshops** | *Disrupt: The FinTech Initiative* 

Sep 2022 - Apr 2023

• Developed and presented a comprehensive Python curriculum, covering topics from introductory programming to financial analysis and data manipulation using Pandas