Michael Paglia

Troy NY, 12180, United States | 518-852-7364 | michaelpagliadev@gmail.com
michaelpaglia.dev | linkedin.com/in/michaeljpaglia | github.com/michaelpaglia

EDUCATION

University at Albany   Albany, NY
Master of Science in Computer Science   *Anticipated May 2025*

University at Albany   Albany, NY
Bachelor of Science in Computer Science   *Anticipated May 2024*
- GPA: 3.82/4.0
- Member of Phi Beta Kappa

EXPERIENCE

Student Researcher   Sep. 2023 – Present
Data Management and Mining Lab   *Albany, NY*
- Supervised by Dr. Petko Bogdanov
- Implements algorithms for temporal graph signal and multi-dictionary tensor decompositions
- Supports rank models and coding optimizers for ADMM, gradient-based, OMP-greedy, and Kronecker
- Integrates custom graph and time-series dictionary generation

STEM Tutor   June 2022 – Present
PAPER   *Remote*
- Coaches students on mathematics and computer science using question-based teaching method
- Offers bilingual (English and Spanish) support while working with multiple students concurrently

Founder and CEO   Nov. 2020 – Present
M.P. Mercantile, LLC   *Troy, NY*
- Founded a start-up e-commerce business hosted on major online marketplaces
- Achieves over six figures annually in gross sales revenue

Mid-Scale Manufacturing Intern   May 2023 – Aug. 2023
Regeneron Pharmaceuticals, Inc.   *Rensselaer, NY*
- Collaborated with IT department to implement a CRUD application interface and REST API
- Provided smart contract-based access using Python, Flask, JavaScript, and Dremio Data Lake
- Automated internally written regulatory report data to drive departmental improvement

PROJECTS

PySpady | *Python, NumPy, TensorLy, Git* | https://bit.ly/pyspady   Sep. 2023 – Present
- In connection with Student Researcher position at University at Albany
- Python library leveraging state-of-the-art and sparse encoding algorithms to analyze spatial-temporal data
- Features data compression, missing value imputation, future value prediction, and autocompletion
- Machine learning determines the best combination of dictionaries, models, and optimizers for given dataset

Operating System Simulator | *Java, Git* | https://bit.ly/os-simulator   Sep. 2023 – Nov. 2023
- Designed for training typical operating system capabilities without requiring a VM
- Features priority scheduling, processes, messages, paging, and virtual memory using the local JVM

Custom Language Interpreter | *Java, Git* | https://bit.ly/custom-interpret Aug. 2022 – Nov. 2022
- Defines a functional programming language with pseudocode-like syntax to introduce people to coding
- Capable of lexical analysis, parsing, and semantic analysis into an interpreted output

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, MIPS
Frameworks: Node.js, Flask, JUnit, WordPress
Developer Tools: Git, Docker, Dremio, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Libraries: pandas, NumPy, TensorLy, Matplotlib