# George Forgey

Boston, MA — Phone: 225-315-2484 — Email: forgey.g@northeastern.edu LinkedIn: linkedin.com/in/george-forgey — GitHub: github.com/George-Forgey Co-op availability: Jan-Jun 2026

## **EDUCATION**

## Northeastern University

Boston, MA

Candidate for Bachelor of Science

September 2024 - May 2027

• Major: Computer Science and Mathematics; GPA: 4.0/4.0

• Related Courses: Fundamentals of CS I/II; Object-Oriented Design; Data Structures and Algorithms; Logic and Computation; Calculus III; Linear Algebra; Differential Equations; Group Theory; Statistics

#### Computer Knowledge

Languages: Python, Java, JavaScript, HTML/CSS, Racket, MATLAB, JSON

Frameworks: React, Node.js, Flask, FastAPI

Developer Tools: Git, Docker, VS Code, Visual Studio, PyCharm, Eclipse, IntelliJ

Cloud: AWS, Google Cloud Platform, Vercel

Libraries: NumPy, Pandas, Scikit-Learn, SciPy, SymPy, OpenCV, PyTorch, Tkinter, Streamlit

Certifications: AWS Certified Cloud Practitioner (CCP)

### WORK EXPERIENCE

## Northeastern University

Boston, MA

Calculus III Teaching Assistant

September 2025 - Present

- Grade 100<sup>+</sup> quizzes each week, as well as tests and exams, for multivariable calculus.
- Create calibrated rubrics to ensure reliable, consistent scoring across sections.
- Return feedback quickly and maintain organized grade records to support instructors and TAs.

# PROJECTS

# PFT Interpreter — Python, OpenCV, PaddleOCR, JSON, Tkinter

September 2024 – Present

- Developed novel software for automated pulmonary function test interpretation in conjunction with the pulmonology department at Beth Israel to streamline the workflow of the medical doctors
- Implemented template matching for table detection, with cell-segmentation and validation checks to minimize OCR read errors.
- Achieved 99% OCR and diagnosis accuracy on labeled tables via validation.

## Energy Consumption Forecast — Python, Prophet, Pandas, Matplotlib

July 2024 – August 2024

- Created a forecasting pipeline with Prophet, modeling daily/weekly/yearly seasonality and holiday effects.
- Optimized model hyperparameters using a grid search approach to achieve an accuracy of 90.4% according to standard regression metrics (e.g., MAPE, RMSE).
- Automated data prep and visualization to easily generate forecast reports 9 months into the future.

## Spotify Song Recommender — Python, Streamlit, NumPy

May 2024 – June 2024

- Developed an interactive Streamlit app for instant, user-tailored song recommendations.
- Analyzed attributes such as energy, danceability, and tempo to rank candidates from a catalog of 30,000<sup>+</sup> tracks.
- Leveraged the Spotify Web API and added interactive data visualizations for transparency and tuning.

#### Interests

Soccer; Cooking; Chess; Violin