

Barnabas Novak

New York | barnabasnovak@icloud.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#) | International

EDUCATION

California State University Los Angeles

Expected Graduation: May 2025

Bachelors of Science in Computer Science | 3.8 GPA

SKILLS

Languages *Proficient* Java(5yrs) · Python(3yrs) *Intermediate* Kotlin(1yrs) · C++(2yrs) · SQL(1yrs) · JavaScript(1yrs) · HTML(2yrs)

Software VSCode · MatLab · Unity · Final Cut Pro · Canva · TensorFlow · JupyterNotebook · Vercel · Bootstrap · Git · Figma

EXPERIENCE

Charging Eagles - President

Sep 2023 - Present

Charging Eagles - Vocational Liaison

Sep 2024 - Present

California State University Los Angeles

Los Angeles, CA

- Led communications with project managers, faculty, sponsors, teams, and vocational partners
- Fostered teamwork, promoting equal participation across diverse student disciplines

Software Engineering Resident

Sep 2024 - Present

Headstarter

New York, NY

- Building 14+ machine learning, ai-engineering and full-stack projects in fast-paced software team environments
- Developed 5+ neural networks in Python, 11 apps in Typescript on AWS/Vercel with dev and production environments
- Implemented llm-chaining, hyperparameter tuning, fine tuning on 10+ LLM models controlling for latency & accuracy,
- Coached by Google Machine Learning, Google Kubernetes, Two Sigma, Tesla, Figma and Citadel Engineers

Co-Founder Hungarian Young Professional Engagement Network (HYPE)

Jun 2024 - Present

Hungarian American Coalition

United States

- Expanding the Hungarian American Coalition's leadership initiatives for Hungarian professionals in the U.S

Software Engineering Fellow

Jun 2024 - Sep 2024

Headstarter

New York, NY

- Spearheaded cloud workshops on compute/storage/databases as part of 200 ambassadors nationwide
- Distributed \$15,000+ computing credits to 300+ students/professionals on open-source and agile apps

Optimization & Simulation Engineering Intern

Aug 2024 - Aug 2024

Audi & University of Győr

Győr, Hungary

- Optimizations for powertrain systems using C++ and MATLAB to automate data analysis and simulation processing
- Project Manager and team won the Best ESG concept award

PROJECTS

US-Bank Churn Prediction | Solo Project (~30 hours) - [Github](#)

Oct 2024

- Used 30k+ data set, Llama 3.1b, Groq and Vercel to evaluate accuracy of predicting when banking customer quits
- Created an end-to-end solution complete with sending automated personalized email to banking customer based on feature engineering, normalization, model training, evaluating and hyperparameter tuning across 5 LLM models

Brain Tumor Classification | Solo Project (~20 hours) - [Github](#)

Nov 2024

- Used neural networks in Python to classify 1000 MRI scans into 3 types of possible brain diseases with custom model
- Generated multimodal MRI reports for neurosurgeons in under 200MS after image classification, construction & training

Visionary Conferences Website | Solo Project (~30 hours) - [Website](#)

Aug 2024 - Nov 2024

- Part of the organizer team and developed conference website from scratch to fully functioning website

Discord Clone | Solo Project (~30 hours) - [Github](#)

Oct 2024

- Used WebRTC, React and Vercel to deploy a clone of real-time chat and video functionality of popular communication service
- Built a production backend service that handles upto 10 real-time conversations processing 100GB of video every second

CareerSwipes | Team Project (~50 hours) - [Github](#)

Sep 2024

- Designed an AI-based recommendation system for career reviews and recommendations using Python and web scraping
- Frontend fully developed solo in accordance with team's ideas and colors

Activities

HungarianHub | Published 5 blogs on Hungarian in America and related

Dec 2020 - Present

New York Marathon Finisher | Youngest Hungarian ever to complete

Nov 2021

Certificates

- **Mendix** | Certified in 2024 - Mendix Rapid Developer
- **Infoblox** | 2024-2026 - Infoblox Qualified NIOS DDI Operator
- **dSpace** | Certified in 2023 - XiL Simulations and HiL Development
- **MathWorks** | Certified in 2023 - Matlab Onramp Certificate