

# Barnabas Novak

Los Angeles, CA | [barnabasnovak@icloud.com](mailto:barnabasnovak@icloud.com) | <https://www.linkedin.com/in/barnabas-novak> | <https://github.com/BarnabasNovak1> | <https://barnabasnovak.dev> | International

## Education

**Bachelor of Science in Computer Science**  
**California State University - Los Angeles** | Los Angeles, CA

Expected Graduation: June 2025

GPA: 3.79

- Honors College, minor in Real Estate
- Relevant Coursework: Data Structures, Algorithms, Software Engineering, Cybersecurity, 3D Game Development

## Experience

**Hungarian Young Professional Engagement Network (HYPE)**

Co-Founder | June 2024 – Present

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

**Software Engineering Fellow**

*Headstarter AI Fellow* | June 2024 – September 2024

- Built AI-powered flashcard generators and support assistants using Python, Java and React Framework
- Deployed 5 projects using Vercel with a framework in React, Node.js, MUI, JavaScripts and Python
- Coached by engineers from Amazon, Google, Bloomberg, and Capital One

**Optimization & Simulation Engineer Intern**

*Audi Development Camp* | Győr, Hungary | August 2024

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

**HIL/SIL software simulation engineering intern**

*Audi Development Camp* | Győr, Hungary | July 2023

- Developed SIL/HIL simulations for electric vehicle powertrains

**Software Engineering Intern**

*Biotia* | Budapest, Hungary | June 2023

- Assisted the Scrum Master in managing sprint cycles and facilitated agile team meetings
- Shadowed software engineers in the development of healthtech solutions, working with Java and C++ on backend infrastructure

## Main Projects

**AI Flashcard Generator** | Personal Project | 20+ hours | 2024

- Used Python, TensorFlow, and Firebase to build an AI-powered flashcard generator for educational purposes
- Integrated OpenAI's GPT API and Firebase for real-time user interaction, enabling dynamic card creation based on user input

**AI Support Assistant** | Personal Project | 10+ hours | 2024

- Built a personal support chatbot with OpenAI key integrated and designed looks

**CareerSwipes** | Team Project | 50+ hours | 2024

- Designed an AI-based recommendation system for career reviews and recommendations using Python and web scraping techniques

**Visionary Scientists Conference Website** | [visionaryscientists.com](http://visionaryscientists.com) | 100+ hours | 2024

- Developed conference website from scratch to fully functioning website with images, videos, documents and registration integrated

## Skills

- **Programming Languages:** Python (3 years), Java (2 years), C++ (2 years), JavaScript (2+ years), SQL (2+ years), Kotlin (1+ years)
- **Softwares & Tools:** Firebase, GitHub, OpenAI API, React, Node.js, Jupyter Notebook, Google Workspace, Microsoft 365, VSCode, Eclipse, Unity, Slack, VirtualBox, PyCharm, Vercel, Final Cut Pro, Canva, Figma

## Activities & Certifications

- **Battery Workforce Challenge - Charging Eagles** | 2023 – Present - Club President | 2024 - Present - Vocational Liaison
- **Hungarian Hub** | 2020 - Present - Contributor
- **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

## Achievements

- **Youngest Hungarian New York Marathon Finisher** | 2021
- **Tegball Men's Doubles** | 150th in World Ranking | 2021 - 2024
- **High School Captain** | Soccer, cross country running