David William Erwin

Tampa Bay, FL, USA | Prague, CZ ● david.erwin.cz68@gmail.com ● +420-737-675-140
[LinkedIn](#) | [GitHub](#) | Native English | Conversational Czech

PROFILE SUMMARY

Passionate Computer Science student with expertise in embedded programming and machine learning, with a particular interest in applying deep learning to financial forecasting. Skilled in collaborating with professional teams, leading small groups, and developing efficient machine learning pipelines and real-time hardware solutions. Excited to contribute technical expertise to impactful AI and ML projects.

EDUCATION

Czech Technical University (České Vysoké Učení Technické)   Bachelor graduation: Summer 2025
Electrical Engineering and Computer Science

Czech Technical University Master's Program   Masters graduation: Summer 2027

RELEVANT COURSEWORK

Bachelor Thesis – Data-flow framework for complex machine learning pipelines
- Supervisor – Ing. Gustav Šír, Ph.D. Šír
- (In progress, expected: Summer 2025)

Computer Architectures – Semestral project
- Embedded programming project on a MicroZed board, led a small team in designing and implementing a multi-stage real-time program at the hardware level.

PROFESSIONAL EXPERIENCE

Pablo Dylan – *Machine Learning Intern (Los Angeles)*   June 2024 – August 2024
Supported a small team in:
- Data acquisition, transformation, and feature engineering to optimize dataset quality
- Designed and implemented an efficient data pipeline for seamless processing and model integration.
- Developed and deployed a custom neural network model tailored to meet project-specific objectives.

TECHNICAL SKILLS

Languages: Python, Rust, C, C++, Kotlin, Mojo
Developer Tools: Git, GitHub Integration/Actions, Docker, API Implementation, Bash, PowerShell, Linux
Technologies/Frameworks: TensorFlow, PyTorch, Google JAX, NumPy, Pandas, Sci-Kit, Matplotlib

TECHNICAL EXPERIENCE

For more projects, please visit my [GitHub](#)
Classification Neural Network – *Coded in pure C99*   April 2024 – May 2024
- A full-fledged variable layer neural network that classifies 28x28 grayscale digits from the MNIST dataset

Davis AI – *An attempt at a Jarvis (Ironman) AI that controlled home appliances*   June 2022 – October 2022
- Integrated OpenAI, ElevenLabs, and AssemblyAI APIs to create a responsive and capable chat bot

PROFESSIONAL DEVELOPMENT & INTERESTS

Private Pilot License (PPL)   Expected: June 2025
- Demonstrated strong decision-making skills, effective time management, situational awareness, attention to detail, and problem solving in high pressure environments through extensive training and flight experience.

Ice hockey player and Coach (Youth)
- 14+ years of private club ice hockey, USPHL Elite National Semifinalists 2021