ILONCZAI ANDRÁS

[**ilonczai.andras16@gmail.com**](mailto:ilonczai.andras16@gmail.com)[**https://www.linkedin.com/in/ilonczai-andrás-349b61265/**](https://www.linkedin.com/in/ilonczai-andrás-349b61265/)

**(+36) 50 109 85 33**[**github.com/Ilonczai-Andras**](https://github.com/Ilonczai-Andras)

**WORK EXPERIENCE**

## [University of Debrecen](https://inf.unideb.hu/), Faculty of Informatics Part-time

*Demonstrator* September 2024 – 2025 February

* I helped the students of the Programming Languages 1,2 course to learn the C and Java programming languages
* I supported the students in understanding the material and answering questions in exercises
* I held regular consultations, providing individual help to those who needed support

[**Avander Software Development**](https://avander.io/) **Kft** Hybrid (HO / Budapest)

*Junior Software Developer* June 2024 - October 2024

* I worked in an agile team in four-week sprints, with daily standup meetings
* I participated in frontend and backend tasks, bug fixes and new feature development
* I gained experience in full-stack development, problem solving and teamwork

**STUDIES**

[**University of Debrecen**](https://inf.unideb.hu/)

*Bachelor of Computer Engineering* September 2021 - February 2025

# Main subjects: programming languages 1,2, embedded systems, systems programming, assembly programming

## [Nyíregyházi Egyetem Eötvös József Gyakorló Általános Iskola és Gimnázium](https://eotvos.nye.hu/)

*Mathematics faculty* September 2017 - May 2021

# Main subjects: computer science, mathematics

**PROJECTS**

[**Job Tracker Dashboard**](https://github.com/Ilonczai-Andras/Web-development-projects/tree/main/React/job%20tracker%20dashboard)*, Private project (In progress)* March 2025 – currently

* I developed a modern Kanban-based job search dashboard that allows users to track their applications, monitor deadlines, view statistics and use LinkedIn integration.
* The project uses a React frontend, Node.js (Express) backend, PostgreSQL database, Auth0 based authentication and React Query + dnd-kit based interactive interface.
* The solution supports multi-user accounts and is built with a scalable architecture.

[**Confectionery application**](https://github.com/lm108109/cukorvirag)*, Debreceni Egyetem* August 2024 - February 2025

* The Cukorvirág project is a web application for a fictional confectionery shop, whose frontend was entirely developed by me using modern technologies like React and Tailwind CSS.
* The goal was to create a responsive, user-friendly ordering interface that provides a smooth connection between customers and the shop. During development, I worked closely with the backend team (Spring Boot, Java) to gain a complete understanding of how the web applications worked.

[**Engineering Calculator**](https://github.com/Ilonczai-Andras/Engineering-calculator-thesis) **(Thesis), University of Debrecen** March 2024 - August 2024

* Built in Python using the PyQt5 library, it provides much more than simple arithmetic - it includes modules for complex mathematical functions such as differential equations, probability, statistics and logical operations.
* In my thesis, I will describe in detail the technological choices, including Python's object-oriented features, exception handling and the use of graphical libraries.
* The calculator's user-friendly interface combines several mathematical tools into a single, easily accessible application that illustrates the intersection of mathematics and programming in practical engineering tasks.

[**BMP generator**](https://github.com/Ilonczai-Andras/C-programming-projects/tree/main/Systems-oriented-programming)**, University of Debrecen** Feb. 2024 - May. 2024

* I have developed a data communication application in C that provides efficient data transfer using both socket and file-based methods
* The project includes a custom bitmap (BMP) image generator that visually represents the resulting numerical data
* An important element is real-time signal handling and file generation with custom BMP headers and pixel arrays
* The solution demonstrates the capabilities of low-level system programming by integrating file I/O, socket programming and bitmap image generation into a single communication protocol.

[**Morse Android app**](https://github.com/Ilonczai-Andras/Mobile-app-development-projects/tree/main/Android/Morse-Android-App)**, University of Debrecen** Feb. 2023 - Feb. 2023

* I have developed an Android mobile app that converts text into Morse code and uses the flashlight on the device to display the code.
* Users can enter text via the keyboard or by extracting it from an image using OCR technology, making the app versatile for different input methods.
* This project combines text recognition and hardware control, enabling real-time display of Morse code, even for practical purposes.

**CERTIFICATES**

* [**IT Specialist Python**](https://github.com/Ilonczai-Andras/Certiport/blob/main/Ilonczai%20Andras%20Certiport%20Python.pdf)ID**:** DKQa-4wb2

Issued by Certiport - A Pearson VUE BusinessMay 2024

**International Computer Drivers License - Level One (ICDL)** ID: HU000005938

Issued by: ECDLJuly 2021

**SKILLS, LANGUAGES, INTERESTS**

* Languages: English (B2)
* Programming languages: python, Java, C, C#, C++, SQL, x86 Assembly, Matlab, SQL
* Databases: MSSQL, PostgreSQL, Oracle, MySQL
* Web development: PHP, HTML, CSS, JavaScript, Angular, React, Blazor, Tailwind CSS, TypeScript
* Tools and technologies: OpenGL, Android Studio, Azure DevOps, LabView, Microsoft Excel, Git, WPF
* Embedded systems: Raspberry Pi, Arduino
* Operating systems: Linux, Windows
* Interests: Programming, Hardware and Embedded Systems, Video Games, Anime, Reading, Sports