



## Matthaios Gerakis

Software Developer and Electronic Engineer

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Thessaloniki, Greece



### Skills

- C, C++, C#
- Java
- Python
- HTML, CSS
- Javascript
- PHP
- Android Studio
- SQL
- jQuery
- PCB Design
- Electronic Circuits Design

### Languages

- Greek - Native
- English - C2

### Hobbies

- Guitar effect pedals building
- Arduino Projects

## Education

Oct 2015 - Dec 2021

### Department of Information and Electronic Engineering

International Hellenic University, Thessaloniki, Greece

Diploma thesis: "Development of an educational application in order to improve skills in children with special needs".  
(Certificate with commendation as one of the best theses of 2021.) | <https://www.iee.ihu.gr/>

## Experience

Mar 2021 - Now

### Profile Website Development and Maintenance

[salonique-a-pied.com](https://salonique-a-pied.com)

Development of a profile website for tour guides.  
Implementation of communication form and trilingual translation (in Greek, English and French) using PHP.

Nov 2022 - Now

### Full-Stack Developer

Metron Solutions SA

Developing applications for internal use, in order to facilitate and simplify the tasks that the company is called upon to implement. The development takes place on front end as well as on back end and database design.

<https://www.metronsa.eu/>

## Projects

### Arduino Controlled Hi-Fi Amplifier

A Hi-Fi amplifier which is controlled by an Arduino Nano. The Arduino is responsible for selecting audio source (via six touch buttons) and functions like tape monitor, IR commands (Volume Up, Volume Down as well as audio source change) and LED bar colors.

[View Source Code](#)

### Arduino Remote Control Receiver

An Arduino based IR scanner which prints the hexadecimal value of each IR command it receives.

[View Source Code](#)

### MVC Application

An MVC (Model-View-Controller) application implementing CRUD actions (Create, Read, Update and Delete). The project retrieves data from a SQL Database and validates it before submission.

[View Source Code](#)

### Bluetooth speaker

A wooden Bluetooth speaker designed exclusively by me. The frame was designed in a CAD model. The electronic circuits in conjunction with two powerful speakers and two passive speakers implement an 15W Bluetooth speaker.

[View Photos](#)

## Publications

### URL Shortener

A web application that shortens URL addresses for easier sharing. The generated shortened urls are stored and the database is erased every week to prevent size overload.

[View Source Code](#)

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### A Mobile Educational Application for Enhancing Cognitive and Language Skills of Children with Disabilities

Published on [Springer Link](#) - Apr 2022

The current paper aims at the development of a mobile educational application for enhancing cognitive and language skills of children with disabilities. During their development, they receive a variety of stimuli that influence and shape these skills. Therefore, they should be helped and supported as much as possible with all available means. Additionally, the identification of language and cognitive disorders is a major challenge to special education teachers. It is thus important to develop a specially designed application aiming at the enhancement of skills of children with disabilities and will be available to all stakeholders (special education teachers, children, parents).

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## Honours and Awards

2 Mar, 2021

### One of the best Thesis of 2021

Information and Electronic Engineering Department

My thesis selected among all theses of 2021 and awarded with commendation as one out of three best theses in the department.

[View Commendation](#)

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## Courses

14 Jul, 2021

### Python Data Structures

Issued By University of Michigan, Coursera

[View Certificate](#)

26 Mar, 2021

### Programming for Everybody (Getting Started with Python)

Issued By University of Michigan, Coursera

[View Certificate](#)

25 Oct, 2019

### Google Grow Greek Tourism Online

Issued By Google

[View Certificate](#)

Oct, 2018

### 5th Technology Forum attendance

Issued By Technology Forum

[View Certificate](#)