

Freideriki Kaperoni

Athens, Greece • erika.kaperoni@gmail.com • <https://www.linkedin.com/in/kaperoni> • (+30) 6982986323

EDUCATION

- 10/2016 - 11/2021 **National Technical University of Athens (NTUA)**, Athens, Greece
- BSc and MSc in Electrical and Computer Engineering (5-year integrated degree; 300 ECTS)
 - o Primary specialization areas: Electronics and Systems
 - o Secondary specialization areas: Computer Systems, Biomedical Engineering
 - o Grade: 7.91/10.00
- 09/2013 - 06/2016 **High School of Vouliagmeni**, Athens, Greece (Grade: 19.7/20 “Distinction”)

PROFESSIONAL & VOLUNTEERING EXPERIENCE

- 12/2020 - 11/2021 **Member of Microelectronics and Electronic Sensors Laboratory, NTUA, Greece**
- Development of an Electronic Biosensor
 - Researching on the Detection of SARS-CoV-2
 - Development of an electronic circuit using ESP32 chip microcontroller
- 10/2018 - 12/2019 **Chairperson of EMB Chapter, IEEE NTUA Student Branch, Greece**
- Responsible for organizing and coordinating a team of ECE students and Medical students
 - Organizing talks, workshops and projects with R&D companies and research centers in the field of Biomedical Engineering
- 07/2017 **Judge in the National Robot Olympiad of Greece, WRO Hellas 2017 (Regular Category), Greece**
- Rating the participants depending on the tasks their robot completed

HONORS & AWARDS

- **EMB Outstanding Performance Award**, received 2019 Outstanding Regional Student Chapter award Europe, for the great achievements of EMB team of IEEE NTUA Student Branch during 2019

SKILLS

- Programming Languages: C, Python
- Hardware Description Languages: Verilog, VHDL
- Computer Software Tools: Atmel AVR Studio, LTspice Simulator, Logisim. EAGLE, AutoCAD, Microwind, Valgrind, QEMU, Xilinx SDSoc 2016.4, Google Collaboratory
- Assembly Languages: Intel 8085, AVR C, AVR Assembly, RISC-V
- Hardware: Arduino Uno, LilyPad Arduino, ESP32, LOLIN32
- Operating Systems: Windows, Linux
- Scripting languages: Python, Bash
- Word Processing Tools: Microsoft Word, Google Docs, LaTeX (Overleaf), Microsoft Excel, Microsoft PowerPoint

PROJECTS & PRESENTATIONS

- 03/2020 - 06/2020 **Presentation of a project** with title “Analysis of epidemiological profile factors of countries in relevance with the SARS-COV-2 pandemic using machine learning techniques”, National Technical University of Athens, Greece
- 09/2019 - 01/2020 **Presentation of a study research** with title “Electromyogram and emotional stimuli: a psychometric tool”, National Technical University of Athens, Greece
- Description of how EMG can be used as tool for facial expressions and emotions recognition
 - Demonstration of this tool for detecting psychiatric disorders like Depression and Schizophrenia
- 03/2019 - 06/2019 **Presentation of a project** with title “fMRI and Alzheimer Disease Diagnosis”, National Technical University of Athens, Greece
- Described the basic principles of functional MRI and explained the applications of this imaging method to the diagnosis of Alzheimer Disease
- 02/2019 - 05/2019 **Presentation of my study** in “3D printing in artificial parts”, 25th Scientific Congress of Hellenic Medical Students and 13th International Forum for Medical Students and Junior Doctors, Thessaloniki 2019
- Demonstration of 3D printing innovative applications in medical health and the use of 3D printing in artificial parts

LICENSES & CERTIFICATIONS

- The ReGeneration Initiative: Upskilling Greek Youth for the Digital Era by Code.Hub, January 202

PARTICIPATIONS & VOLUNTEERING

- Sustainable Entrepreneurship and Sustainability Reports powered by UNIPI, January 2022
- Women Empowerment Program “WOMENTORS” by Lambrakis Foundation, Ongoing
- Soft & Business Skills Training, 7th cycle of Project Future by Piraeus Bank and ReGeneration, November 2021
- RUTRONIK Electronics Worldwide Web Seminar with title “Biotechnology and Bioengineering Industry - Rutronik TechTalk”, November 2021
- Participated in Erasmus+ Project, France, March 2019
 - o Practices and experiment hands-on workshops on electronic textiles
- 25th Scientific Congress of Hellenic Medical Students and 13th International Forum for Medical Students and Junior Doctors, Thessaloniki 2019
- 5th IEEE Hellenic Student and Young Professional Congress, Xanthi 2019
- IEEE International Conference on Image Processing, Athens 2018
- 31st National Selection Conference of EYP Greece, Athens 2015

LANGUAGES

- **English** (Level C2, Certificate of Proficiency in English, University of Michigan), **German** (Level B2, Goethe Institute), **Greek** (native)