Dro Boodaghian Asl

Work experience

Electronics engineer │ Io-Genix (io-genix.com) │ 01/10/2023 - 01/03/2025 | Rome, Italy (In-Site)

- Designing Bio-chemistry medical device boards - PCB design of more than 20 boards

- Maintaining and finding the problems of the manufactured electronic boards

- Prototype testing in the laboratory

- Embedded programming with STM32, NXP 80C51, ARM, and Atmel Microcontrollers

- Using Sensors and encoders to make a working device

- Supervising other electronic engineers for six months

Web developer │ Giovanni Adami (giovanniadami.com) │ 01/03/2022 - 01/09/2023 | Rome, Italy (Hybrid)

- Photography of the leather products, Photoshop to edit them, and putting them on the website

- Created the online shop from scratch and maintained it.

- Doing Seo and Digital Marketing

- This work was student work, part remote, part present in the shop

Web developer │ Ungex Co. (ungex.com) │ 01/11/2019 - 01/10/2021 | Victoria, Australia (Remote)

- Checking and maintaining the Ungex website

- Working and supervising the other web editors and developers

- Teamwork - Working full-time and in a remote

- SEO and search optimization sites

- Working with WordPress, WooCommerce, PHP, SQL, and servers

Medical device engineering technician │ Sysmex Co. │ 01/01/2018 - 01/10/2019 | Germany (Hybrid)

- Maintenance of hematology devices

- Installing and teaching hematology devices to laboratory users

- Fixing the hydraulic and electronic parts of the devices

- Working in laboratories and harsh conditions

- Critical thinking and finding the problem

Electronic equipment assembler │ DVIN Electronics │ 01/01/2014 - 01/01/2015 | Iran

- Assembling of the Solar and LED light PCB boards

- Relations with suppliers and other beginner PCB assemblers

- Controlling and providing the right products for assembling

- Fixing and finding the problems of the PCB that are not working, and QC

Education & Training

Master's Degree │ Sapienza University of Rome │ 31/08/2020 - 26/03/2025 │ Rome, Italy

Field of study: Nanotechnology Engineering | **Final grade:** 96/110 | **Level in EQF** 7 | **Thesis:** DEVELOPMENT OF A DIGITAL PLATFORM FOR GRAPHENE-BASED WEARABLE SENSORS INTEGRATION | **Address:** Piazzale Aldo Moro, 500185

Bachelor's Degree | Azad University | 31/08/2011 - 21/06/2015 | Tehran, Iran

Field of study: Electrical Engineering - Electronics | **Final grade:** 15.77/20 | **Level in EQF** 6

Pre-University Diploma | Shahid Motahari | 31/08/2009 - 31/05/2010 | Tehran, Iran

Field of study: Science of Mathematics | **Final grade:** 14.94/20 | **Level in EQF** 5

Second cycle of secondary school Diploma | Alborzno | 31/08/2006 - 31/05/2009 | Tehran, Iran

Field of study: Mathematics and Physics | **Final grade:** 17.45/20 | **Level in EQF** 5

Language Skills

Mother tongue(s): **Armenian**

	Understanding		Speaking		Writing
	Listening	Reading	Spoken production	Spoken interaction	
Persian	C2	C2	C2	C2	C2
English	C1	C1	B2	C1	B2
Turkish	B1	B1	A2	A2	A2
Italian	A2	B1	A2	A2	A2

Skills

Microsoft Office | think creatively | Working with AI | Photography | biological hematology | • Critical thinking. | solving problems | Supervising

Full-Stack Developer | Front End: (HTML5, CSS3, JavaScript, Sass, MUI 5, Styled Components, React, React Roter, | operating systems | NEXT JS | PHP | WordPress | Database (MS SQL Server, MySQL, NoSQL, MongoDB) | ICT networking hardware | React JS, React Route, React Hooks, React Dom | Setting up WooCommerce.

Graphic Design | Adobe Photoshop | Adobe Illustrator | Adobe Photoshop Lightroom

Electronics | battery management systems | printed circuit boards | Embedded Programming | Wearable Bio-Sensing | types of electronics | Wearable Electronics | KiCAD, Altium CAD tools | Electronics repair | sensors | PCB Design | electricity | IoT Applications (Arduino, Raspberry Pie) | Proficient knowledge of ESP32 (ESP-IDF) | Nordic Semiconductor | electronics | Microcontroller Programming (Arduino, PIC, NXP) | use of equipment for electronics repair in general | C Programming (Arduino, stm32)

Projects

THESIS:
DEVELOPMENT OF A DIGITAL PLATFORM FOR GRAPHENE-BASED WEARABLE SENSORS INTEGRATION|
01/09/2024 - 26/03/2025

Advisor: D'ALOIA ALESSANDRO GIUSEPPE

Subject: MICRO-NANO DEVICES AND MATERIALS FOR ELECTRICAL ELECTROMAGNETIC APPLICATIONS AND

FUNDAMENTALS

Experience in Research in Electromagnetic compatibility and electrical measurement laboratory

Characterization of graphene-based textiles and sensors

PCB design with Altium Designer for the temperature and pressure sensing of the sensors mentioned above

Arduino programming for the MCU on the circuit

Project Name: DPI-SMART

BORSA DI RICERCA di cui al bando n. 19/2025 │ 19/08/2025 - 27/10/2025

Fund Provider: Professor Maria Sabrina Sarto

Research activities to produce electronics for air conditioning and measurement of sensors and wearable devices. This research project focused on developing a reliable detection system for a specialized piece of safety equipment, (DPI-SMART) the Elvac EFA7 vibration watch. This device is critical for worker safety in high- voltage environments, as it vibrates to alert the user when they are in proximity to a dangerous electrical field.

Certifications

Learn PCB Design By Designing an Arduino Nano in Altium │ Udemy │ 25/08/2022

Certificate no: UC-dOb2d630-7f48-4be3-acd0-bc5540881373

Reference Number: 0004

ude.my/UC-dOb2d630-7f48-4be3-acd0-bc5540881373

Learn SEO for Word Press Websites from Scratch │ eduonix │ 16/05/2020

https://www.eduonix.com/

SEO Training 2020 : Complete SEO Guide For Beginners │ Udemy │ 04/04/2020

Certificate no: UC-224bad25-ae95-41 cc-90b3-11fe6a950dee

ude.my/UC-224bad25-ae95-41cc-90b3-1

Service Engineer of Laboratory equipment │ Electronic Pezeshki Pishrafteh Co. (Sysmex Co.) │ 14/10/2019

Repairing, servicing, and Service back up operation of laboratory equipment.

PMMI Mechatronics: Programmable Logic Controllers 1 (PLCs) │ Tehran Institute of Technology (MFT)│ 14/02/2018

Certificate ID: 516797

https://mft.info/

Publications

Published:

Aiman Mahar, Dro Boodaghian, Alessandro Giuseppe D'Aloia, Hossein C. Bidsorkhi, Maria Sabrina Sarto. "Wearable Integrated Multi-Sensor Modality for Real-Time Health Monitoring."

IEEE Sensors 2025

Poster:

B. Ali, U. Farooq, N. Faramarzi, D. Boodaghian, H.C. Bidsorkhi, A.G. D'Aloia, M.S. Sarto, "Printed Graphene-Based Smart Insole for Real-Time Pedobarometry and Gait Analysis"
IEEE Sensors 2025

Under Process:

N. Faramarzi, D. Boodaghian, H.C. Bidsorkhi, A.G. D'Aloia, M.S. Sarto, "Advanced insole sensor design based on an optimized Graphene-Based ink Smart Insole for Real-Time Pedobarometry and Gait Analysis"

Conferences & Seminars

Summer School D34Health 2025 │ 10/09/2025 - 12/09/2025 │ Castello di Gaeta

"Innovazione Digitale e Tecnologica per una Sanità Sostenibile"

Nano Innovation │ 15/09/2025 - 19/09/2025 │ Rome Sapienza

Took part as a presenter for a stand for DPI SMART project.

Nano Innovation │ 21/09/2021 - 24/09/2021 │ Rome Sapienza

Took part in the conference as a member of the organizational staff for a

total of 29 hours.

Hobbies and Interests

Reading – Cooking – Hiking – Gaming