E J

Profile: System Engineer

SUMMARY

As a System Engineer, my expertise lies in designing, implementing, and optimizing robust IT infrastructures that empower businesses to thrive in today's fast-paced digital landscape. I take pride in my ability to identify unique challenges and develop tailored solutions that drive efficiency, security, and reliability. My technical proficiency spans a wide range of areas, including network architecture, cloud computing, virtualization, and automation.

LANGUAGES

Albanian	Native
English	Fluent

EXPERIENCE

JUL 2022 - PRESENT

Sales and Application Engineer | Present

- . I specialize in medical ultrasound, medical devices, and medical imaging.
- Conduct product demonstrations and training sessions for healthcare professionals.
- Research And Development Engineer, Freelance, JTech Consulting

OCT 2020 – AUG 2021

Research And Development Engineer Intern, PracticePoint

- Working on Biomedical Instrumentation design and Medical IVD product development.
- Field of research Ultrasound Imaging
- Project one: 10. 25. 2020 – 05. 20. 2022, Design, and Implement an Ultrasound Computer Tomography Scanner for scanning Tissue.
- Project two: 10. 25. 2021 – 05. 18. 2022, Design, and Implement a high-accurate 2D motorized imaging device for in vivo PA monitoring.
- Project three: 11. 01. 2021 – 01. 01. 2022, Lubrification, and calibration of the Da Vinci Intuitive Surgical gen one Instrument & Accessory. (Needle drive, Mega Suturecut Needle drive, Mega Needle drive, Large Needle drive, etc.)

OCT 2018 – SEP 2020

Senior Biomedical Engineer

- Lead engineer in diagnostics and maintenance of Salus Maintenance Team Working on Diagnostic and Repair of Medical Devices:
- Computer Tomography scanner GE, including automatic Injectors
- MRI GE
- Ultrasound systems GE Mindray, Philips, Esaote,
- X-Rays GE

MAR 2018 – NOV 2018

Mechatronics Engineer Contract | Present

- 2D – 3D CAD design (Autodesk Mechanical Cad) and of Street Lights Frame and Electrical Panel wiring (worked on Dialux)
- Responsible for operating and maintaining Plastic (150 Watts) and metal laser (500W), cutting, and engraving. (Ruida Laser, Rofin Laser.

DEC 2017 – FEB 2018

Mechatronics Engineer

- Design, manufacture, and wire of Electrical Panels (Software worked on Autodesk Electrical CAD, Schneider Electric)
- Design and Implement civil Electrical Installation.
- Responsible for diagnostic and maintenance of Elevators systems. (Rails, sliders, doors, brakes, electrical panels, wires, electrical motors).

SEP 2014 – SEP 2017

Instructor

- Taught the basics of Electronics and Computer Architecture,
- Responsible for the students' laboratory work and Qualification Projects.
- Lead Instructor for Extracurricular Laboratory Work
- Co-creator of Student Robotic club in Albania (a collaboration with Worcester Polytechnic Institute)
- Creator of the first Student Robotic competition in Albania (cooperation with Worcester Polytechnic Institute)

EDUCATION

Oct 2020 – May 2022

Master of Science in Biomedical Engineering, Worcester Polytechnic Institute (WPI), Worcester, Massachusetts

Courses: Biomedical Instrumentation and Design, Biomedical Image, Medical Device Regulation, Direct Research, Foundation of Robotics, Physiology for Engineers, Independent Study, Surgical Robotics, Thesis.

October 2012 – May 2015

Master of Science in Electrical Engineering, Polytechnic University of Tirana, Albania

Thesis: Digital control of Robotic Arm

October 2009 - October 2012

Bachelor of Science in Mechatronics Engineering, Polytechnic University of Tirana, Albania

Thesis: The use of Automatic Biometric System in the School Environment

SKILLS

Skills in diagnostics

* Diagnostic Medical Devices

* Installation of Medical Devices

* Computer Hardware & Software diagnostics

* Electric and Electronics diagnostic

Skills in design

* Hardware Design
* Mechanics Design
* 2D & 3D Design (AutoCAD, Mechanical CAD)
* 3D Printing an d Modeling
* Electrical Grid and electrical panel Design
* PCB Design (Multisim NI, Ultiboard NI)

Operation system

* Windows OS
* Ubuntu OS
* ROS (Catkin namespace)

Skills in coding

MATLAB

* Data acquisition
* Back projection (DAS)
* Image reconstruction
* Imaging segmentation

Python

C ++

* Robot Kinematics Algorithm
* Robot Dynamics Algorithm

Skills in leadership

* Project Planning
* Strategic Planning
* Product Planning

Other

* Manufacturing
* Product Design
* FDA regulatory (Familiar with FDA regulatory for medical devices)
* Familiar with ISO13485, ISO14971, and IEC 60601-1-2

PUBLICATION

SPIE Conference (The International Society for optics and photonics), 15 February 2021

PAPER: Ultrasound Computer Tomography-Based Tissue-Engineered Blood Vessel Growth Monitoring: A Feasibility Study

Authors: Yichuan Tang, Vanshika Rohera, Enxhi Jaupi, Matthew A. Bruno, Lianne Ureneck, Marilyn E.Galdamez, Marsha W. Rolle, Haichong K. Zhang. Worcester Polytechnic Institute (United States)

AWARDS:

* Fulbright Scholarship Award in the United States, 2020-2022

* Guest Lecturer Teaching Award in Polytechnic University of Tirana, 2017 – 2019

* WPI Albania Project Centre: Robotics Project Award, 2014-2017

VOLUNTARY WORK:

Voluntary in TEDx Tirana organization in the role of Science and Workshop Coordinator, Tirana, Albania.

(http://tedxtirana.com/event.html http://tedxtirana.com/about.html).

- TEDx project worked on:
- 28 May 2016- The common
- 13 January 2017- Cycling City film production
- 25 March 2017- No one is too young to change the world
- 16 September 2017 -Naked