Denis Škerk

EDUCATION

STRATHCLYDE UNIVERSITY
MSc in Electronic & Electrical Engineering
Sep 2020 | Glasgow, Scotland
with distinction

UNIVERSITÀ DEGLI STUDI DI TRIESTE
BSc in Electronic Engineering
Mar 2019 | Trst, Italy

CONTACTS

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COURSEWORK

GRADUATE
Advanced Micro Controllers · Image & Video Processing · Advanced DSP · DSP Principles · Embedded System Design

UNDERGRADUATE
Electronics · Telecommunications · Computer Networks · Automation · Economics

SKILLS

PROGRAMMING
Dart · Python · Perl · C · C++ · QT Designer

OS & OTHER
Flutter · Linux Red Hat · LaTeX · HTML

LANGUAGES
English (native) · Slovenian (native) · Italian (native)

INTERPERSONAL SKILLS
Adaptable · Conflict resolution · Active listener

INTERESTS

Music composition · Consumer Tech · Tennis

CAREER EXPERIENCE

U-BLOX | Specialist Engineer - Validation Modules IoT
Apr 2024 – Present | Sgonico, Italy

- **Network Services Testing**: Developed and executed tests for network services in Perl, focusing on cellular modules' functionality.
- **PSM Testing**: Developed and executed tests in Perl to validate cellular modules' Power Saving Mode functionality and power consumption optimization.
- **Automation Development**: Contributed to automating a Linux-based network simulator within the Automated Testing environment using Python and Perl.
- **GUI Development**: Created a graphical interface using custom Tkinter library in Python for module piloting, integrating with existing terminal control for cost reduction.

LEONARDO - ELECTRONICS | Avionic Software Engineer - Ext. Consultant
May 2021 – Mar 2024 | Ronchi dei Legionari, Italy

- **Radar Simulation**: Developed C++ models and simulations for radar systems in a multi-process environment utilizing shared memory communication.
- **UI Development**: Created radar testing interface using QT Designer 5 to streamline testing procedures.
- **Systems Engineering**: Led system requirements definition and modeling efforts for radar systems.
- **Documentation**: Authored technical documentation adhering to MIL-STD specifications and guidelines.

RB | Photovoltaic System Designer
Nov 2020 – April 2021 | Frazione Stazione Prosecco, Italy

- **Process Automation**: Led initiatives to streamline and automate workflows for photovoltaic system design.
- **System Design**: Developed design solutions and pricing strategies for photovoltaic systems with storage.

MIPOT HI-TECH COMPANY S.P.A. | Software Engineering Intern in R&D Department
Nov 2017, Oct 2018 - Mar 2019| Cormons, Italy

- **Protocol Development**: Engineered a protocol bridge between Modbus (RS-485) devices and LoRaWAN RTX module utilizing microcontroller and UART communication.
- **Hardware Integration**: Designed and implemented adaptation circuits for seamless interface between Modbus devices and microcontrollers.
- **Power Consumption Optimization**: Analyzed and optimized RF receiving unit performance to achieve 100% receiving rate while minimizing power consumption, conducting energy efficiency validation within HCS protocol constraints.

PROJECTS

ECG GENERATION USING GAN | MSc Dissertation
May 2020 – Aug 2020 | Glasgow, Scotland

- Use a Generative Adversarial Network on Pythorch framework to generate the electrocardiograms.
- Pre-process the MIT-BIH arrhythmia dataset on Matlab.
- Model tested on Google's platform Colab.