

# 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 • L<sup>A</sup>T<sub>E</sub>X • HTML

### LANGUAGES

English (native) • Slovenian (native) • Italian (na-  
tive)

### INTERPERSONAL SKILLS

Adaptable • Conflict resolution • Active listener

## INTERESTS

Music composition • Consumer Tech •  
Tennis

## CAREER EXPERIENCE

### U-BLOX | SPECIALIST ENGINEER - VALIDATION MODULES IoT

Jan 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 – Present | 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.