

# Denis Škerk

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## EDUCATION

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### 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

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## CONTACTS

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## COURSEWORK

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### GRADUATE

Advanced Micro Controllers  
Image & Video Processing  
Advanced DSP  
DSP Principles  
Embedded System Design  
Professional Studies and Assignments

### UNDERGRADUATE

Electronics  
Telecommunications  
Computer Networks  
Automation & Control Systems  
Java Programming  
Electromagnetic Fields  
Economics

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## SKILLS

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### PROGRAMMING

Dart • Python • C • C++ • QT Designer

### OS & OTHER

Flutter • Linux Red Hat  $\text{\LaTeX}$  • HTML

### LANGUAGES

English (*advanced*) , Slovenian (*native*) ,  
Italian (*native*)

### INTERPERSONAL SKILLS

Can easily adjust in different situations •  
Conflict resolution and mediation • Listening  
skills

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## CAREER EXPERIENCE

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### 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.
- 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 modelling and simulation in C++ in a multi-process environment that uses a shared memory to enable the communication between them.
- Development of a UI for radar testing with QT Designer 5.
- Definition of system requirements and system modelling.
- Document writing following the MIL-STD.

### RB | PHOTOVOLTAIC SYSTEM DESIGNER

Nov 2020 – April 2021 | Frazione Stazione Prosecco, Italy

- Digitisation and automation of the internal processes when designing photovoltaic systems.
- Design and price quotation of photovoltaic systems combined with storage units.

### MIPOT HI-TECH COMPANY S.P.A. | SOFTWARE ENGINEERING INTERN IN R&D DEPARTMENT

Oct 2018 - Mar 2019, Nov 2017 | Cormons, Italy

- Developed a protocol bridge between Modbus (RS-485) devices and LoRaWAN RTX module using micro controller and UART communication
  - Built adaptation circuit between Modbus device and micro controller
  - Analyzed RF receiving unit performance, optimizing timing for 100% receiving rate while minimizing power consumption
  - Validated energy efficiency targets within HCS protocol constraints
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## PROJECTS

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### 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.

