# 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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in denisškerk

ngib4

# COURSEWORK

#### GRADUATE

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

#### UNDERGRADUATE

Electronics • Telecommunications • Computer Networks • Automation • Economics

# **SKILLS**

#### **PROGRAMMING**

 $\mathsf{Dart} \cdot \mathsf{Python} \cdot \mathsf{Perl} \cdot \mathsf{C} \cdot \mathsf{C} {}^{\text{++}} \cdot \mathsf{QT} \; \mathsf{Designer}$ 

#### **OS & OTHER**

Flutter  $\cdot$  Linux Red Hat  $\cdot$  LATEX  $\cdot$  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 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

#### **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.