# Milo Noblet

A third-year engineering student with a strong interest in telecommunications and security; I'm looking for experience particularly in the defence and transport sectors. I have a track record demonstrating teamwork, leadership, project management and an ability to grasp new technical concepts quickly – I would be eager to work in product development or research.

## Education

2017–2021 **MEng Electronic Engineering with Mobile and Secure Systems**, *University of Southampton*. An Institution of Engineering and Technology accredited course with a strong practical and laboratory skills element. On track for a first-class degree.

- Part 1 content included circuit analysis, digital systems & microprocessors, semiconductor devices, electrical materials & fields, introductory communications and control theory.
- Part 2 content included further communications and control theory, signal processing, digital systems and computer engineering as well as semiconductor and electronic design.
- Part 3 modules include management & law, digital coding & transmission, security of cyber physical systems and cyber security. Individual project relating to MIMO techniques for 5G New Radio.

2010–2017 'A'-levels and GCSEs, Calday Grange Grammar School, Merseyside.

- o 'A\*'s in A-level Mathematics, Electronics and Physics
  - 'A's in AS-level Geography and General Studies
- Ten 'A\*'s at GCSE, including 'English Baccalaureate'

# Experience

Summer 2019 Summer Student, Defence Science and Technology Laboratory, Porton Down, Salisbury.

I particularly enjoyed the interesting and fulfilling work at Dstl, as I worked with brand new technologies and concepts. I was placed in the Cyber and Information Systems division, where I developed a radar emulator based on the GNU Radio package using custom Python blocks. I then tested the system I developed on various software defined radio platforms, providing valuable information to inform the overall programme.

August 2019 Senior Mentor, Electronics & Computer Science Taster Course, University of Southampton.

Returned to the department's ECS taster course in a more managerial role, working with two other senior mentors to ensure the smooth running of the course through constant communication with the approximately 15-strong mentor team.

Summer 2018 Undergraduate Intern, British Telecommunications, Adastral Park, Suffolk.

A summer spent at BT Labs working with the converged networks group in Applied Research. I carried out independent research into the use of software defined radio in LTE and 5G development and testing. This required self-teaching on the air interface and phsyical layer, understanding ETSI and 3GPP technical standards. I evaluated multiple SDR platforms and software packages, implementing measurement of physical layer parameters in MATLAB, calibrating my solution using RF test equipment.

August 2018 Mentor, Electronics & Computer Science Taster Course, University of Southampton.

Student mentor on the ECS taster course, giving approximately  $140\ 16/17$ -year-olds a week's insight into the opportunities offered in this area and university study. Responsibilities included pastoral care of attendees, in addition to supporting them in technical laboratory sessions.

Voluntary experience

2018 onwards **STEM Ambassador**.

2015–2019 **Youth Committee Chair**, Radio Society of Great Britain, (Vice-Chair up to Sep 2018)

A management role working with volunteer radio amateurs aged 14 to 26 to support the Society's young membership as well as encouraging more young people to take up the hobby.

Assisted 16/17 year olds in obtaining their Ofcom-issued Foundation amateur radio licences on 'Engineering Experience Days' at the National Radio Centre, Bletchley Park

- Instrumental in planning 'Youngsters on the Air 2017', an international event which saw 85 young people from across Europe gather to experience the various aspects of amateur radio. Responsible for a stream of 15 young people for the week.
- Organised attendance at school contacts with astronaut Sir Tim Peake aboard the International Space Station. Represented the Society and young people within the hobby.

#### 2013–2017 Cadet Warrant Officer, Combined Cadet Force, Royal Navy, Wirral.

Quickly rose through the ranks of the school Combined Cadet Force contingent, gaining experience leading and mentoring a team of non-commissioned officers as well as training cadets in the naval syllabus.

- Selected as Mayor's Cadet 2015/16, accompanying the Mayor to civic and military events
- o Represented the cadet force at the 2015 Festival of Remembrance, Royal Albert Hall
- Twice led divisions of cadets at the Naval Cadet Forces Summer Camp, HMS Excellent, Portsmouth
- Attended multiple courses at Defence School of Communication and Information Systems, Blandford, gaining insight into tactical & secure telecommunications and being invited back to teach other cadets.

# Skills

Programming C (hosted and embedded), C++

Simulation SystemVerilog, SPICE

Scripting MATLAB, GNU Octave, LaTeX, Python

Hardware Experience with Altera FPGAs, PIC and Atmel AVR microcontrollers, EAGLE for PCB design

Equipment Oscilloscope, logic analyser, spectrum analyser, vector network analyser

Other Full clean UK car driving licence (2 years +)

#### Awards

2017 Institution of Engineering and Technology Diamond Jubilee Scholarship, supported by *British Telecommunications* 

2017 Zepler Scholarship, Department of Electronics and Computer Science, University of Southampton

2017 Sir Herbert Emerson Memorial Prize for Voluntary Service, Calday Grange Grammar School

2015 Arkwright Engineering Scholarship, sponsored by the Radio Communications Foundation

## Communication Skills

2017 Lecture (45 min.) at Radio Society of Great Britain National Convention, Milton Keynes

# Interests

- Amateur radio

A social and international hobby for self-training in communication and technical investigation. Started in 2013 and gained Full licence with distinction in 2017.

- Southampton University Royal Naval Unit Training focussed on leadership, seamanship and navigation, with a significant social element.

- Hillwalking

Usually North Wales or the Peak District, often carrying a small transceiver and antenna as part of the 'Summits On The Air' scheme in amateur radio.

- Squash

Keen to further develop my physical fitness, I've joined the university squash club this year for primarily social games.