

PROFILE OVERVIEW

A mentor, inventor, and a lifelong learner with a broad industrial experience in research and development at individual contributor, team member and lead levels. Enjoys working on projects that blur the lines between virtual and physical spaces and interactions with a near-magical experience for the user. Clear written and verbal communication and documentation are his core strengths. Prefers technical hands-on work with opportunities to bring strategic, novel, and critical thinking to the table. Ability to spot gaps and opportunities while creating systems and solutions. Great with task and time management and tracking progress towards set milestones. Highly adaptive to changing priorities and requirements. Recognizes and appreciates the value of multidisciplinary teamwork for generating impactful results. Embraces stepping out of comfort zone to successfully complete assigned tasks. Upholds transparency, authenticity, empathy, recognition, and constructive communication while engaging with people. His ideal role provides autonomy, presents technical problems relevant to human behaviour, and provides bandwidth to learn, strengthen and expand his skillset in an inclusive and diverse environment.

WORK EXPERIENCE

[February 2019 – ...] – RESEARCH SCIENTIST (Wireless Sensing)

📁 Intel Corporation – Intel Labs, Oregon, USA

Relevant skills & responsibilities: Python programming, focus on WiFi, RFID and radar, ROS node development & testing, exploration of AI methods in wireless sensing systems, data collection, rapid hardware prototyping, research proposal preparation & presentation, technical writing, IP creation. **Highlights:** Created Intel's largest real-world RFID dataset with 1000 individual tags attached to clothing items ★ Created a novel labelling method for FMCW radar to allow annotations during collection ★ Created a novel subject/object indoor detection metrics for FMCW radar ★ Created and deployed ROS enabled wireless number tool for collecting real-world human subject interaction data and metrics at an elementary school.

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### [April 2020 – August 2020] – PATENT TECHNOLOGIST (Autonomous Technologies) – (part time)

📁 Intel Corporation – Intel Patent Group, California, USA

**Relevant skills & responsibilities:** Intel's IP portfolio evaluation and management, Notice of Allowance (NOA) assessments.

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[February 2017 – ...] – PATENT COMMITTEE MEMBER (Autonomous Technologies) – (part time)

📁 Intel Corporation – Intel Patent Group, California, USA

Relevant skills & responsibilities: Assessment of invention disclosures submitted by Intel and MobilEye employees on drones, autonomous vehicles and robots, provision of feedback to inventors and the portfolio manager on making patent filing decisions. **Highlights:** Reviewed over 1500 invention disclosures to date and provided written feedback and filing decision to inventors.

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### [January 2017 – ...] – PATENT MENTOR & CONSULTANT (Patent Training) – (part time)

📁 Intel Corporation – Patent101 Training Group, California, USA

**Relevant skills & responsibilities:** Co-organize and run quarterly training workshops for inventors, provide mentorship in group and one-to-one sessions, create and present technical training material, train patent mentors. **Highlights:** Created a fully virtual workshop program (including harvesting, hands on working and pitch to panel sessions) This framework is now accepted and executed as the standard Patent101 training since 2020 ★ 527 inventors at Intel have been trained to date.

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[September 2016 – January 2019] – RESEARCH SCIENTIST (Human Behaviour Understanding)

📁 Intel Corporation – Intel Labs, Oregon, USA

Relevant skills & responsibilities: Python programming, data collection, rapid hardware prototyping, research proposal preparation & presentation, development, and field deployment of inhouse human engagement metrics collection and visualization tools, technical writing & presentation, IP creation. **Highlights:** Departmental Recognition Award (DRA) for delivering a data collection system with a teacher display at high school classrooms to enable human subject behaviour understanding ★ Design, implementation and field deployment of a complete sensing and data collection system inside a car to deliver a pseudo-autonomous car experience to human subjects in the real world.

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### [March 2015 – August 2016] – SENIOR EMBEDDED SOFTWARE ENGINEER (Wearable Technology)

📁 Intel Corporation – Intel Labs, Istanbul, Turkey

**Relevant skills & responsibilities:** Embedded C programming, embedded platform design and prototyping, customer/stakeholder/partner engagement and management, preparing and executing technical demos at industry expositions, increasing Intel's global wearable technology exposure, mentoring junior staff, IP creation. **Highlights:** Created the embedded

system of the world's first interactive "haute couture" dress (see <https://vimeo.com/178521026>) ★ Butterfly Dress was one of the top 10 demos in 2016 and featured in Intel Brand Book.

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[August 2014 – February 2015] – SENIOR EMBEDDED SOFTWARE ENGINEER (Wearables – contractor)

✉ Intel Corporation – Intel Labs, Istanbul, Turkey

Relevant skills & responsibilities: Embedded C programming, embedded platform prototyping, demo creation on Intel embedded SoCs.

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**[January 2011 – July 2014] – STARTUP CO-FOUNDER & SOLUTION ARCHITECT (Embedded Systems)**

Whizcomm Limited, Istanbul, Turkey

**Relevant skills & responsibilities:** Providing technical consultancy to companies in Europe on wireless and embedded systems, engaging with customers to capture their pain points and to provide bespoke solutions, supplier engagement. **Highlights:** Designed and implemented the world's first portable automated personnel tracking RFID wearable system with M2M communications and visual interface (including hardware and software) for collecting human performance metrics.

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[January 2010 – January 2011] – SENIOR DSP ARCHITECT (Metal Detection Systems)

Nokta Engineering, Istanbul, Turkey

Relevant skills & responsibilities: DSP programming in C, troubleshooting, platform validation, laboratory, and field testing, contributing to strategic technical planning of next generation of products, demonstration of products to customers. **Highlights:** Created the company's first digital signal processing metal detection and discrimination pipeline as a key differentiator.

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**[March 2009 – December 2009] – SENIOR SOFTWARE ENGINEER (Private Mobile Radio – User Interface)**

Etherstack, London and Reading, United Kingdom

**Relevant skills & responsibilities:** Embedded programming in C++, focus on P25 standard, implementation, testing and debugging of Man Machine Interface (MMI) and display features, supporting FCC compliance testing for hand portables.

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[July 2006 – January 2009] – SOFTWARE TEAM LEADER (Private Mobile Radio - Security)

✉ Software Radio Technology plc, Basingstoke, United Kingdom

Relevant skills & responsibilities: Embedded programming in C, translation of ETSI TETRA encryption standard clauses into software architecture specification, software implementation, testing/troubleshooting/debugging, peer reviewing team's code and providing guidance, demonstration of encryption features to upper management and customers. **Highlights:** My teams Air Interface Encryption (AIE) and End-to-End Encryption (E2EE) software was incorporated into 600 handheld radios sold to customers in Korea and China.

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**[March 2006 – July 2006] – SENIOR SOFTWARE ENGINEER (Private Mobile Radio - Security)**

✉ Software Radio Technology plc, Bath, United Kingdom

**Relevant skills & responsibilities:** Embedded programming in C, implementation of cryptographic algorithms and key management systems in compliance with ETSI TETRA security specifications.

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[January 2002 – April 2006] – SENIOR R&D ENGINEER (Wireless Communication Systems)

HW Communications Ltd, Lancaster, United Kingdom

Relevant skills & responsibilities: Programming in C, VHDL, Matlab, software implementation of turbo codes, data acquisition from medical devices, system integration & testing, technical proposal preparation for securing project grants from the EU and UK's DTI, demonstration of prototypes to customers and requirements gathering from clients. **Highlights:** Secured three Specialized Task Force (STF) contracts from ETSI TETRA Standardization Committee – a first for the company ★ Invented the "Multimedia Exchange Layer" in section 7.2 of ETSI's Technical Report, [ETSI TR 102 580 v1.1.1 \(2007-10\)](#) ★ Received a recognition award from ETSI for my contributions to the standardization efforts.

ACADEMIC BACKGROUND

[October 1998 – February 2002] – Doctoral Degree - PhD (Improved Turbo Coding), Lancaster University, UK

[October 1997 – May 1998] – Master's Degree - MSc (Signal Processing Applications), Lancaster University, UK

[October 1993 – June 1997] – Bachelor's Degree - BSc (Electronics and Telecommunications), ITU, Turkey

[August 1990 – May 1992] – International Baccalaureate, United World College, NM, USA

(For a list of my patents & publications to date please visit <https://tinyurl.com/ctpublist>)