Cagri Tanriover

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Portland, OR, 97229, USA

Senior product and research lead with 20+ years of experience in turning ideas into production systems. Shipped code to 600+ devices | Created 26 patents | Designed and led IP training for 400+ engineers | Reviewed 1,700+ patent disclosures.

Work Experience

AI RESEARCH ENGINEER/SCIENTIST - WIRELESS SENSING, INTEL, Hillsboro, Oregon — February 2019 - December 2025

• Advised the manager and the Lab director on creating strategic wireless research roadmaps in WiFi and radar, managing stakeholders including internal business units and computer OEMs (i.e., Dell, Lenovo, and HP) to align with product strategy.

• Screened 20+ and interviewed 10+ candidates, advising on hiring researchers to join Intel Labs and contributing to team growth.

• Managed 2 EU Horizon and 2 university research projects in wireless sensing, ensuring successful project delivery and collaboration.

• Built Intel's RFID customer browsing dataset with 1,000 tagged products, establishing a foundational resource for sensing research and product development.

• Created a mmWave radar hand gesture dataset with 600 labeled instances and ground truth videos, replacing the internal Google Soli dataset used in spiking neural network (SNN) research and enhancing AI/ML capabilities.

• Developed a deep learning vision pipeline, saving $300 per laptop by optimizing the deployment of 3D cameras for model training and inference, thereby improving cost-efficiency in product development.

• Engineered a novel sparse point cloud selection method for mmWave radar applications, utilizing 30% less training data in Point Transformer networks without any loss in accuracy, advancing AI/ML model efficiency.

• Co-authored 7 peer-reviewed publications and 4 US patents, contributing to the advancement of wireless sensing technologies.

PATENT TECHNOLOGIST, INTEL, Hillsboro, Oregon — February 2017 - December 2025

• Created and delivered a new patent training program, educating 400+ Intel engineers on intellectual property strategy and innovation, fostering a culture of creativity.

• Reviewed and voted on 1,700+ patent disclosures across wearables, autonomous technologies, user experience, and machine learning, ensuring robust IP protection.

• Achieved recognition in the top 2.5% at Intel with 26 patents and in the top 0.5% for fastest patent filing, receiving a $15,000 cash award for exceptional performance and innovation.

RESEARCH ENGINEER/SCIENTIST - HUMAN ACTIVITY RECOGNITION, INTEL, Hillsboro, Oregon — September 2016 - January 2019

• Advised the manager and Lab director on research strategies in personalized learning and autonomous in-cabin passenger experiences, managing stakeholders including internal business units and external contractors (i.e., GlobalMe, and Tarentum) to drive product innovation.

• Received the Departmental Recognition Award for effectively managing student learning engagement through system deployment in two classrooms, enhancing user experience in educational settings.

• Designed and implemented a pseudo-autonomous car experience, collecting and managing 500GB of real-world road data to support machine learning research in Intel Labs for novel passenger experiences in autonomous vehicles.

• Led the technical implementation and field deployment of a laptop frustration detection system, collecting 1TB of in-the-wild audiovisual data across 30 users to support downstream ML research on laptop user experience modeling.

• Co-authored 6 peer-reviewed publications and 10 US patents, contributing to the fields of human activity recognition and user experience.

SENIOR EMBEDDED SYSTEMS ENGINEER - WEARABLES, INTEL, Istanbul, Turkey — August 2014 - August 2016

• Led technical engagements with 25 project partners (EzraTuba, Osteoid, DeFacto, SANKO, Arcelik, Zorlu, Aselsan, Tubitak, etc.), creating wearable Proofs of Concept (PoCs) and designs with three key partners, demonstrating leadership and product development skills.

• Established and fully equipped the Intel Ignition Lab as a collaborative space for all project partners, fostering teamwork and innovation.

• Designed and assembled the first Intel Edison breakout board for all in-house wearable projects, enabling rapid prototyping and development.

• Engineered the world's first interactive haute couture Butterfly Dress, recognized as a top 10 Intel PoC in 2016 and featured in the Intel Brand Book, showcasing creativity and cutting-edge design.

• Developed a groundbreaking smart wearable to monitor spasticity in cerebral palsy patients, demonstrating a commitment to user-centered design and impactful solutions.

CO-FOUNDER/SOLUTION ARCHITECT - WEARABLES, WHIZCOMM LIMITED, Istanbul, Turkey — February 2011 - July 2014

• Created a novel industrial wearable system (i.e., WhizTrack) utilizing cellular and RFID technologies for real-time indoor personnel tracking, demonstrating expertise in system architecture and product design.

• Generated $50K in revenue through consulting contracts with clients across Europe, showcasing business development and leadership capabilities.

DIGITAL SIGNAL PROCESSING (DSP) ARCHITECT, NOKTA ENGINEERING, Istanbul, Turkey — January 2010 - January 2011

• Advised the general manager on technical strategy and future product roadmap, contributing to strategic planning and product development.

• Designed and implemented the company's first digital signal processing pipeline for a new metal detector model, the Golden Gate, showcasing technical expertise in DSP.

SENIOR SOFTWARE ENGINEER, ETHERSTACK LIMITED, London, UK — March 2009 - December 2009

• Developed advanced MMI display features for a mission-critical PMR handset, enhancing user experience and functionality.

• Secured pre-sale FCC certification, ensuring compliance for a commercial radio model and demonstrating attention to detail and regulatory understanding.

SOFTWARE TEAM LEADER - ENCRYPTION, SOFTWARE RADIO TECHNOLOGY, Basingstoke, UK — March 2006 - January 2009

• Led a team of 3 software engineers, ensuring compliance across all operational security features and demonstrating leadership and project management skills.

• Converted mandatory features in ETSI TETRA encryption standards into technical software specifications for team implementation, showcasing technical translation and leadership.

• Developed and integrated full security features running on 600 commercial handsets in the field, ensuring robust product performance and user trust.

• Secured the UK government's (NCSC) approval of all security features as a prerequisite to commercialize PMR handsets in Asia, demonstrating successful stakeholder management and product validation.

SENIOR RESEARCH AND DEVELOPMENT ENGINEER, HW COMMUNICATIONS LIMITED, Lancaster, UK — January 2002 - February 2006

• Designed and implemented a serial ECG data acquisition pipeline for Welch Allyn patient monitors, enabling real-time patient vital sign transmission over wireless radios and improving healthcare technology.

• Secured the company's first three ETSI Specialized Task Force (STF) contracts, generating over $100K in EU-funded research through successful proposal preparation and project leadership, demonstrating strong business development and research management skills.

• Authored the "Multimedia Exchange Layer" (Section 7.2) of ETSI's TEDS Standard and received a personalized achievement certificate from ETSI for contributions to TETRA standardization, highlighting expertise in communication systems and standards development.

Core Skills

Product management, interaction design, user experience, product design, design systems, user research, user needs, tooling, AI/ML, SaaS, UX, collaboration, leadership, creativity, confident, WiFi, RFID, deep learning, wearables, machine learning, digital signal processing, TETRA, communication systems, C, C++, Python, PyTorch, ScikitLearn, embedded, wireless sensing, mmWave radar, MATLAB

Education

PhD, LANCASTER UNIVERSITY, UK — October 1998 - February 2002

Enhanced Turbo Codes

MSc, LANCASTER UNIVERSITY, UK — October 1997 - May 1998

Digital Signal Processing (DSP)

BSc, ISTANBUL TECHNICAL UNIVERSITY (ITU) — October 1993 - June 1997

Electronics and Telecommunication Engineering

IB, UNITED WORLD COLLEGE, USA (UWC-USA) — August 1990 - May 1992

International Baccalaureate in Liberal Arts