



Armin Gharibi

Researcher- PhD

Smart industry

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Via Filippo Corridoni 14-1

Pisa-Italy

Nationality: Iranian

DoB: 4th of July 1989

Profile

Well-rounded and professional team player dedicated to continuing academic pursuits and research works at a collegiate level . Able to effectively self-manage during independent projects, as well as collaborate as part of a productive team. More than ten years of industrial experiences and 5 years of research experience in multiple specialized fields.

Employment History

Research fellow at University of Pisa,-Italy

03/2024 – Present

Currently employed at the Department of Information Engineering within the University of Pisa. The focus of research is on the Near-field radio frequency sensors for object tracking and localization.

Researcher PhD candidate at University of Pisa,-Italy

11/2020 – 01/2024

Employed at the Department of Information Engineering at the University of Pisa. My focus is on the development of RF sensors for applications in robotics and industrial settings, utilizing additive manufacturing techniques. In first phase of a novel sensing system was designed with the aim of localization and tactile sensing of robotic hand. Another approach was use of rf sensors for tracking patient activities in hospital. Design and application of passive 3D tags in Clothing industry is another phase of these activities.

Production Manager at CTL KONIK KILIT,

Istanbul-Turkey

02/2018 – 11/2020

Determining the production methods, overseeing the design of new and unconventional components, utilizing CAD/CAM technology, ensuring quality control, engaging in research and development, addressing technical challenges, optimizing manufacturing processes, and enhancing overall production procedures.

Links

[Google Scholar](#)

[Research Gate](#)

[LinkedIn](#)

Skills

CAD/CAM.....★★★★★

CNC Machining★★★★★

2D/3D Prototyping★★★★☆

Finite Element Analysis.....★★★★☆

Programing.....★★★★☆

Software skills

Inventor CAD/CAM.....★★★★★

SolidWorks/CATIA.....★★★★☆

Power Mill.....★★★★☆

LS Dyna.....★★★★☆

Deform 2D/3D.....★★★★☆

CST MW Studio.....★★★★☆

MATLAB.....★★★★☆

Languages

English (C1).....★★★★☆

Turkish (Native).....★★★★★

Azerbaijani (Native).....★★★★★

Persian (Native).....★★★★★

Italian (A1).....★☆☆☆☆

Project Research Assistant at Marmara University, funded by (TUBITAK). Istanbul-Turkey

07/2015 – 07/2017

Supported project: “High Speed Machining of Ti-5553 Alloy Under Cryogenic, MQL, and High-Pressure Coolant: Machining Performance and Surface Integrity Characteristics”

In this project, we investigated the effects of various cooling and lubrication methods under a wide range of cutting speeds, on the machining performance and surface integrity of Ti-5553. The chip formation process of Ti-5553 alloy was modeled Deform 2D finite element modeling software.

CNC-CAD/CAM Staff in industrial part and mold manufacturing Companies, Tabriz-IRAN 2007 – 2014

Fabrication of molds and parts for real industrial applications.

Education

University of Pisa, Pisa-Italy PhD.

Smart Industry, Department of Information Engineering

11/2020 – 01/2024

Thesis: Design and Manufacturing of RF Sensors for Robotic and Industrial Applications Using Additive Manufacturing Technology

Supervisor: Prof. Dr. Simone GENOVESI

University of Coimbra-Portugal

Visiting PhD. researcher

ISR, Department of Electrical Engineering

07/2022 – 03/2023

Thesis: Additive Manufacturing of RF Passive Tags and Antennas

Supervisor: Prof. Dr. Mahmoud Tavakoli

Marmara University, Istanbul-Turkey M.Sc.

Mechanical Engineering Department

07/2015– 06/2018

Thesis: Machining Performance Of Ti-5553 Alloy Under Various Cutting Conditions

Supervisor: Prof. Dr. Yusuf KAYNAK

Azad University, Tabriz branch, Tabriz-IRAN

B.S. Mechanical Engineering, Manufacturing and production Department

09/2007 – 06/2013

Thesis: The Effect Of PVD And CVD Coatings On Cutting Performance Of Cutting Tools

Supervisor: Prof. Dr. Mohammad Ali RAHBARI ASR

Awards and scholarships

- **Research Grant** University of Pisa, DII, March 2024 – August 2024
- **Research PhD Grant**, University of Pisa, December 2020 – January 2024
- **Research Fellow Position of The Scientific and Technological Council of Turkey (TUBITAK) ,** Marmara University, July 2015 – July 2017
- **Young Scientists Award**, The International Union of Radio Science 2022
- TUBITAK Publication Promotion Awards

References

Prof. Simone GENOVESI from Dept. of Information Engineering, University of Pisa

Email: simone.genovesi@unipi.it

Prof. Filippo COSTA from Dept. of Information Engineering, University of Pisa

Email: filippo.costa@unipi.it

Giuliano MANARA from Dept. of Information Engineering, University of Pisa

Email: giuliano.manara@unipi.it

Prof. Mahmoud Tavakoli from Institute of Systems and Robotics, University of Coimbra

Email: mahmoud@isr.uc.pt

Prof. Mark Cutkosky from Department: Mechanical Engineering, Stanford University

cutkosky@stanford.edu

Prof. Michele LANZETTA from Dept. of Civil and Industrial Engineering, University of Pisa

Email: michele.lanzetta@unipi.it

Prof. Yusuf KAYNAK from Dept. of Mechanical Engineering, Marmara University

Email: yusuf.kaynak@marmara.edu.tr

Publications

RF Sensors and Electromagnetics

Journal

- **Design and Application of a Novel Radio Frequency Wireless Sensor for Pre-touch Sensing and Grasping of Objects**

A Gharibi, F Costa, S Genovesi

IEEE Sensors Journal

Implementation of 4D Wireless sensor for Robot Manipulation

A Gharibi, F Costa, S Genovesi

Sensors (Under review)

Conference

- **Radiofrequency System for Localizing a Robotic Hand on a Surface Tagged with Passive Resonators**

A Gharibi, M Tavakoli, F Costa, AF Silva, S Genovesi

17th European Conference on Antennas and Propagation (EuCAP), 1-4(2023)

- **3D Printed Radiofrequency Sensing System For Robotic Applications**

A Gharibi, M Tavakoli, AF. Silva, F Costa, S Genovesi

13th IEEE International Conference on RFID Technology and Applications(2023)

- **Wireless Sensor for Precision Grasping of Objects and Tools by Robotic Hands**

A Gharibi, F Costa, S Genovesi

3rd URSI Atlantic and Asia Pacific Radio Science Meeting (AT-AP-RASC), 1-4(2022)

Manufacturing Process and Machining

- **FEM and Analytical Modeling of the Incipient Chip Formation for the Generation of Micro-Features**

M Lanzetta, A Gharibi, M Picchi Scardaoni, C Vivaldi

Materials 14 (14),2021

- **High speed machining of near-beta titanium Ti-5553 alloy under various cooling and lubrication conditions**

E Tascioglu, A Gharibi, Y Kaynak

The International Journal of Advanced Manufacturing Technology 102 (9),2019

- **Cryogenic machining of titanium Ti-5553 alloy**

Y Kaynak, A Gharibi

Journal of Manufacturing Science and Engineering 141 (4)2019

- **The influence of depth of cut on cryogenic machining performance of hardened steel**

A Gharibi, Y Kaynak

Journal of the Faculty of Engineering and Architecture of Gazi University 34 (2)2019

- **The effects of cutting parameters on machining performance of titanium alloy Ti-5553**

Y Kaynak, A Gharibi

Advances in Materials and Processing Technologies 5 (2),2019

- **Comparison of flood cooling, minimum quantity lubrication and high-pressure coolant on machining and surface integrity of titanium Ti-5553 alloy**

Y Kaynak, A Gharibi, U Yılmaz, U Köklü, K Aslantaş

Journal of Manufacturing Processes 34, 2018

- **Experimental and numerical study of chip formation in orthogonal cutting of Ti-5553 alloy: the influence of cryogenic, MQL, and high-pressure coolant supply**

Y Kaynak, A Gharibi, M Ozkutuk

The International Journal of Advanced Manufacturing Technology 94 (1),2018

- **Progressive tool wear in cryogenic machining: the effect of liquid nitrogen and carbon dioxide**

Y Kaynak, A Gharibi

Journal of Manufacturing and Materials Processing 2 (2),2018