

# Javad Ghofrani

## Curriculum Vitae

### Education

- 2013–2016 **PhD**, *Clausthal University of Technology, Department of Informatics/Institute for Disposal Research*, **PhD Thesis**: Conceptualization and software development of a simulation environment for probabilistic safety assessments of radioactive waste repositories (Magna Cum Laude) Thesis advisors: Prof. Klaus J. Röhlrig, Prof. Sven Hartmann .
- 2010–2013 **Master of Science: Informatics**, *Clausthal University of Technology, Department of Informatics*, **Master Thesis**: A novel approach to improve the recycling methods to refined and reconnect broken links in the web of data, Academic/Research advisor: Prof. Sven Hartmann .
- 2004–2009 **Bachelor of Science: Software Engineering**, *Iran University of Science and Technology*, **Bachelor Thesis**: XML based Distributed Artificial Neural Network with Globus Toolkit. Academic/Research advisor: Dr. Hamidreza Mahini.

### Experience

#### Vocational

- 2025–now **Head of the Institute for Artificial Intelligence and Autonomous Systems/ Professor of Computer Science**, BONN-RHEIN-SIEG UNIVERSITY OF APPLIED SCIENCES, DEPARTMENT OF COMPUTER SCIENCE , Sankt Augustin, Germany. Teaching Autonomous Mobile Robots, Collective Robotics, and Self-Organizing Systems, Supervising student projects, Seminars, MSc theses and internships, Institute Management.
- 2022–2025 **Deputy Head of Institute and Interim Professorship in Service Robotics**, UNIVERSITY OF LUEBECK, INSTITUTE OF COMPUTER ENGINEERING, Luebeck, Germany.  
Project Management and writing research proposals (KDT, BMBF, Horizon), Participated in the creation of a new Master's program Master-AI, Teaching Master and Bachelor Courses of Cyber-physical Systems, Bio-Inspired Robotics, and Computer Engineering (German and English), Supervising student projects, Seminars, PhD/MSc/BSc theses and internships, Organization of New Master-AI Course, Institute Management.
- 2023–2024 **Visiting Lecturer**, JÖNKÖPING UNIVERSITY, DEPARTMENT OF PRODUCT DEVELOPMENT, PRODUCTION AND DESIGN , SCHOOL OF ENGINEERING , Jönköping, Sweden.  
Teaching "Production Development II, Virtual Tools and Modelling" for Master Production Engineering

- 2020–2022 **Postdoctoral Fellow**, UNIVERSITY OF LUEBECK, INSTITUTE OF COMPUTER ENGINEERING, Luebeck, Germany.  
Head of Intelligent Systems Lab, Project Management and Writing Research Proposals, Teaching Master Courses of Computer Engineering (German and English), Supervising Student Projects, Seminars, PhD/BSc/MSc Theses and Internships.
- 2018–2020 **Postdoctoral Fellow**, HTW DRESDEN UNIVERSITY OF APPLIED SCIENCES, SMART PRODUCTION SYSTEMS, Dresden, Germany.  
Group leader of IT architectures at Smart Production Systems, Project Management and Writing Research Proposals, Supervising Student Projects, BSc/MSc/dipl. Theses and Internships.
- 2016–2018 **Postdoctoral Fellow**, UNIVERSITY OF HANOVER, SOFTWARE ENGINEERING GROUP, Hanover, Germany.  
Teaching Master Courses of Software Engineering, Project Management, Supervising Student projects, BSc/Msc Theses and Internships.
- 2013–2016 **Research Assistant/ PhD Candidate**, CLAUSTHAL UNIVERSITY OF TECHNOLOGY, INSTITUTE OF DISPOSAL RESEARCH, Clausthal-Zellerfeld, Germany.  
ENTRIA Project: Interdisciplinary Analyses and Development of Evaluation Principles for Disposal Options for Radioactive Waste
- Miscellaneous**
- 2025–2025 **Visiting Lecturer**, VGU (*Vientaneme German University, Vietnam*, Teaching Collective Robotics).
- 2025–2025 **Visiting Lecturer**, NTPU (*National Taipei University, Taiwan*, Teaching Collective Robotics).
- 2022–now **Technical Advisor**, *Zarela Team*, Consulting Machine Learning Techniques for Brain Signal Processing.
- 2020–2021 **Visiting Lecturer**, *FOM University of Applied Sciences Hamburg*, Teaching Operating Systems (in German).
- 2020–2021 **Visiting Lecturer**, *University of Guilan, Iran*, Teaching Operating Systems and Software Engineering (in English).
- 2018–2020 **Visiting Lecturer**, *FOM University of Applied Sciences Leipzig*, Teaching Data Structures and Algorithms, (in German).
- 2018–2018 **Visiting Lecturer**, *Clausthal University of Technology*, Teaching Web Information Systems (in English).
- 2017–2021 **Technical Advisor**, *MyFitCoach GmbH*, Technical advisor for DevOps.
- 2014–2016 **Android App Developer**, *Freelancer*.
- 2010–2013 **Student Research Assistant**, *Clausthal University of Technology*, Working with research Teams of Human Machine Interaction, Teaching assistant for bachelor and master courses.

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## Patents

- 2021 **Computer-implemented control system for adaptive, rule-based decision support for modular, industrial manufacturing environments**, *Dirk Reichelt, Javad Ghofrani, Eric Brandt, Felix Brandt, David Heik*, Paten: DE102021125887A1, HTW Dresden, Germany.

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## Awards

- 2020 Professorship for Distributed Information Systems, IMC University of Applied Sciences Krems, Austria (offer declined due to non-attractive financial conditions)

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## Grants

- 2023-2025 **Co-PI: DT4HC**, *Fundend by Uni Luebeck in collaboration with University of Sharjah*, Design and development of a Framework using Deep Learning and Digital Twins in IoT-Based Digital Healthcare , 80K€.
- 2023-2025 **Co-PI: Arrowhead fPVN** , *Fundend by KDT(EU): not funded by DE*, Running by Non-German Partners, 400K€.
- 2023-2025 **Co-PI: AIMS**, *Fundend by KDT(EU): Accepted*, 800K€.
- 2022-2025 **Co-PI: EMdrive** , *Fundend by BMBF (DE)*, design and develop a virtual prototype of service oriented architecture for safety and security evaluation in the autonomous driving , 70K€/400K€.  
Partner: Infineon, KIT, Bosch
- 2021-2024 **Co-PI: DAIS** , *Fundend by ECSEL (EU)*, Distributed Artificial Intelligent System , 530K€.
- 2020-2022 **PI: COREM Project**, *Funded by SMWK(DE)*, Controlling Maintenance of Production Systems via Remote Technology, 132K€.
- 2019-2019 **PI: DEBUTI Project**, *Funded by SMWK(DE)*, Applying digital assistant systems for controlling robots in industrial manufacturing, 10K€.

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## Supervision of Students

### Phd

- 2023 - starting **PhD Thesis**, *Zeinab Sadat Rabani*, Reliable services and low power consumption in dynamic edge environment, Institute of Computer Engineering, University of Luebeck, Germany.
- 2019 - 2024 **PhD Thesis**, *Arezo Bozorgmehr*, Application of machine learning in public health, Institute for General Medicine and Family Practice, University Hospital Bonn, Germany.

### Master

- 2024 **Master Thesis**, *Steffen Häusler*, Development of a Visual SLAM System for Localizing Firefighter Emergency Forces under Limited Visibility, University of Luebeck.
- 2024 **Master Thesis**, *Martin Sauer*, Enhanced Waste Segmentation Using an Electric Actuator System, University of Luebeck.

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- 2024 **Master Thesis**, *Mishra Shaarang*, Development of an AI-based defect detection tool for quality control in a production environment, University of Luebeck.
- 2023 **Master Thesis**, *Janik Hippmann*, Monocular Depth Estimation in a Logistics Environment, University of Luebeck.
- 2022 **Master Thesis**, *Christopher Stark*, improving the integration and application of gRPC for inter-service communication in microservice based architecture , University of Luebeck.
- 2022 **Master Thesis**, *Gowhtam Reddy Eeda*, Orchestration of Distributed Systems for the Industrial Internet of Things , University of Luebeck.
- 2018 **Master Thesis**, *Ahmad Kadoura*, A Systematic Approach for Extracting Microservices from Monolithic Legacy Enterprise Systems, Leibniz University Hannover, Germany
- 2017 **Master Thesis**, *Steffen Griese*, Feasibility Analysis of a Navigation for Public Transport, Leibniz University Hanover, Germany.

#### Bachelor and Diploma

- 2024 **Bachelor Thesis**, *Patrick Pfau*, Adaptive Control Strategy in Robot Swarms, University of Luebeck.
- 2024 **Bachelor Thesis**, *Yasin Al Hakim Kirschstein*, Multi Agent Pathfinding with local collision detection and global congestion avoidance, University of Luebeck.
- 2023 **Bachelor Thesis**, *Darian Lemke*, Domain specific language for the composition of Digital Twins, University of Luebeck.
- 2023 **Bachelor Thesis**, *Alexander Fischer*, Automatic Passenger Counting in Public Transport using a Digital Twin, University of Luebeck.
- 2023 **Bachelor Thesis**, *Alexander Kossivas-Rapp*, You shall not pass: Virtual Walls in Human-Swarm-Interaction, University of Luebeck.
- 2023 **Bachelor Thesis**, *Abdelrahman Elkhodari*, Interactive Reinforcement learning System for Swarm Robotics, German University of Cairo.
- 2023 **Bachelor Thesis**, *Abdelrahman Maaty*, Decision-making Support for Human-swarm-interaction , German University of Cairo.
- 2023 **Bachelor Thesis**, *Vincent Schiller*, Application of virtual reality in human-swarm interaction , University of Luebeck.
- 2023 **Bachelor Thesis**, *Friederike Weilbeer*, Modulating subjective time perception through emotionally expressive robot motion under the leader-follower swarm-control paradigm , University of Luebeck.
- 2023 **Bachelor Thesis**, *Xaver Leon Pilgrimm*, Entwurf und Entwicklung eines Diagnosewerkzeuges zur Erkennung von Fehlern im Schwarmverhalten durch maschinelles Lernen, University of Luebeck.
- 2023 **Bachelor Thesis**, *Michaela Stein*, Anwendung des 3D-Drucks in der industriellen Automatisierungstechnik (Application of 3D Printing in industrial automation), University of Luebeck.

- 2020 **Diploma Thesis**, *Bastian Büchner*, Emotionserkennung zur Gefahrenprävention für Werker bei der Arbeit mit einem Cobot in der Fertigung, HTW Dresden.
- 2020 **Bachelor Thesis**, *Max Schwerdtner*, 2020, Herausforderungen und Erfolgsfaktoren von Wissensmanagement in agilen Organisationen – Status quo anhand einer systematischen Literaturrecherche.  
HTW Dresden
- 2020 **Diploma Thesis**, *Tobias Krahl*, Untersuchung der situationsabhängigen und variablen Bewegungssteuerung mit einem kollaborativen Roboter, HTW Dresden.
- 2019 **Diploma Thesis**, *Paul Patolla*, Investigation of the reproducibility of smart factory use cases in the IoT automation framework Arrowhead, HTW Dresden.
- 2017 **Bachelor Thesis**, *Julian Horstmann*, Integration of a Database into a Computer Tomography Dashboard, Medizinischen Hochschule Hannover/ Leibniz University Hannover.

## Teaching Activities

### Lectures

- 2023 – 2024 **Mobile Roboter (Mobile Robots)**, *Institute of Computer Engineering, University of Luebeck, Germany, Main Lecturer.*
- 2023 – 2024 **Wireless Sensor Networks**, *Institute of Computer Engineering, University of Luebeck, Germany, Main Lecturer.*
- 2023 – 2024 **Evolutionary Robotics**, *Institute of Computer Engineering, University of Luebeck, Germany, Main Lecturer.*
- 2022 – 2023 **Einführung in Robotik und autonome Systeme (Introduction to robotics and autonomous systems)**, *Institute of Computer Engineering, University of Luebeck, Germany, Main Lecturer.*
- 2022 – 2023 **Collective Robotics**, *Institute of Computer Engineering, University of Luebeck, Germany, Main Lecturer.*
- 2022 – 2023 **Organic Computing**, *Institute of Computer Engineering, University of Luebeck, Germany, Main Lecturer.*
- 2021 – 2024 **Real Time Systems**, *Institute of Computer Engineering, University of Luebeck, Germany, Main Lecturer.*
- 2020 – 2023 **Parallel Computer Systems**, *Institute of Computer Engineering, University of Luebeck, Germany, Main Lecturer.*
- 2020 – 2020 **Operating Systems**, *FOM University of Applied Sciences, Hamburg, Germany, Main Lecturer.*
- 2020 – 2021 **Operating Systems**, *University of Guilan, Iran, Main Lecturer.*
- 2020 – 2021 **Software Engineering**, *University of Guilan, Iran, Main Lecturer.*
- 2020 – 2020 **Data Structures and Algorithms**, *FOM University of Applied Sciences, Leipzig, Germany, Main Lecturer.*
- 2018 – 2020 **Industrial Control Engineering**, *Faculty of Informatics / Mathematics, HTW Dresden University of Applied Sciences, Germany, Main Lecturer.*

- 2018 – 2020 **Business Process Management**, *Faculty of Informatics / Mathematics, HTW Dresden University of Applied Sciences, Germany, Lecture Assistant.*
- 2018 – 2020 **Industrial Robotics**, *Faculty of Informatics / Mathematics, HTW Dresden University of Applied Sciences, Germany, Lecture Assistant.*
- 2016 – 2018 **Web Information Systems**, *Clausthal University of Technology, Department of Informatics, Germany, Lecture Assistant.*
- 2016 – 2018 **Software Product Lines for Mobile Applications**, *Software Engineering Group at Faculty of Electrical Engineering and Computer Science, Institute of Practical Computer Science, Leibniz University of Hanover, Germany.*  
Main Lecturer
- 2016 – 2018 **Microservices Architectures**, *Software Engineering Group at Faculty of Electrical Engineering and Computer Science, Institute of Practical Computer Science, Leibniz University of Hanover, Germany, Main Lecturer.*

### Seminars

- 2022 **Master Seminar Informatik**, *"Cyber-Physical Systems"*, Institute of Computer Engineering, University of Luebeck, Germany.
- 2022 **Bachelor-Projekt Informatik**, *"Bio-Inspired Robotics"*, Institute of Computer Engineering, University of Luebeck, Germany.
- 2021-2025 **Bachelor-Projekt Informatik**, *"Einführung in die disruptiven Technologien für Industrie 4.0"*, Institute of Computer Engineering, University of Luebeck, Germany.

### Internships

- 2023 **Internship Master Robotics and Autonomous Systems**, *Controlling a user-defined kinematic via Siemens-PLC*, Institute of Computer Engineering, University of Luebeck, Germany.
- 2023 **Internship Master Robotics and Autonomous Systems**, *Anpassung Roboterprogramm einer neuen Variante Einer Kolbenkomplettanlage (Adaptation of robot program of a new variant of a complete piston system)*, Institute of Computer Engineering, University of Luebeck, Germany.
- 2023 **Internship Master Robotics and Autonomous Systems**, *Building an autonomous Sailboat*, Institute of Computer Engineering, University of Luebeck, Germany.
- 2022 **Research Internships in Science and Engineering (DAAD RISE Germany)**, *Trust Framework for swarm robotics*, Institute of Computer Engineering, University of Luebeck, Germany.
- 2022 **School Internship (for students of 8th class)**, *Internet of Things*, Institute of Computer Engineering, University of Luebeck, Germany.
- 2022 **Projektpraktikum Master Medizinische Informatik**, *Implant Positioning with an Automated Landmark Regression in 3D CBCT Scans using Convolutional Neural Networks*, Institute of Medical Informatics, University of Luebeck, Germany.
- 2022 **Projektpraktikum Master Robotics and Autonomous Systems**, *Integration of Arrowhead Framework on Fischertechnik for Building a Digital Twin*, Institute of Computer Engineering, University of Luebeck, Germany.

- 2022 **School Internship (for students of 12th class)**, *Robotic*, HTW Dresden University of Applied Sciences Dresden, Germany.
- 2018 **Research Internships in Science and Engineering (DAAD RISE Germany)**, *Using Voice Assistants as HMI for Collaborative Robots (Cobots)* , HTW Dresden University of Applied Sciences Dresden, Germany.

## Organisation of Scientific Meetings

- 2021 **ArrowHead Tools Project Workshop**, *Main Organizer of the Project Meeting*, Luebeck, Germany.
- 2020 **SE Conference**, *Chair of Security Session*, Innsbruck, Austria.
- 2018 **21 Brains Hackathon**, *Main Organiser*, In collaboration with Baker Hughes(an international GE company) and Leibniz University of Hannover, Hannover, Germany.

## Institutional Responsibilities

### Management

- 2025–now **Director of Institute of Artificial Intelligence and Autonomous Systems (A2S)**, *Bonn-Rhein-Sieg University of Applied Sciences*, Germany, .
- 2022–2025 **Deputy Head of Institute of Computer Engineering**, *University of Luebeck*, Germany, .
- 2022–2025 **Interim Professorship in Service Robotics**, *University of Luebeck*, Germany, .
- 2020 – 2025 **Head of Lab for Intelligent Systems**, *Institute of Computer Engineering*, University of Luebeck, Germany.
- 2022 – 2024 **WP Coordinator EMDrive**, *University of Luebeck*, Germany.
- 2020 – 2024 **Project Manager NEUPA**, *University of Luebeck*, Germany.
- 2020 – 2022 **Contact Person and coordinator in Arrowhead Tools Project**, *University of Luebeck*, Germany.
- 2020 **Project Manager COREM**, *HTW Dresden University of Applied Sciences*, Germany.
- 2020 **Project Manager Computer Vision for Industrial Production Inspection (EPL Deutschland)** , *HTW Dresden University of Applied Sciences*, Germany.
- 2019 **Project Manager Debuti**, *HTW Dresden University of Applied Sciences*, Germany.
- 2019 – 2020 **Project Manager**, *KomAa: Complete wheel automatic assembly machine* , HTW Dresden University of Applied Sciences, Germany.
- 2019 – 2020 **Project Manager**, *Visualization of RFID information in the Mixed- Reality application* , HTW Dresden University of Applied Sciences, Germany.
- 2018 – 2020 **Contact Person and coordinator in Arrowhead Tools Project**, *HTW Dresden University of Applied Sciences*, Germany.
- 2018 – 2020 **Group leader of IT architectures at Smart Production Systems**, *HTW Dresden University of Applied Sciences*, Germany.
- 2018 **Project Manager**, *KoSeBOT - Kontext-Sensitive Cobotik* , HTW Dresden University of Applied Sciences, Germany.

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## Reviewing Activities

### Journals

- 2020 **Frontiers - Frontiers in the Internet of Things** .
- 2022 **MDPI - Multimodal Technologies and Interaction**.
- 2020 **MDPI - Sensors**.

### Grants

- 2022 **Deutscher Akademischer Austauschdienst (DAAD)**, *IFI - Internationale Forschungsaufenthalte für Informatikerinnen und Informatiker*.

### Conferences

- 2024 **ICRA 2025**, *Program Committee member*.
- 2024 **SPLC 2024**, *Program Committee member*, challenge track.
- 2024 **AMP 2024**, *Program Committee member*.
- 2023 **AMP 2023**, *Program Committee member*.
- 2023 **IEEE CBI 2023**, *Program Committee member*.
- 2022 **AMP 2022**, *Program Committee member*.
- 2021 **AAAI Conference**, *Program Committee member*.
- 2018 – 2020 **DEXA Conference**, *Program Committee member*.
- 2020 **IROS Conference**, *Program Committee member*.
- 2020 **ICAS Conference**, *Program Committee member*.
- 2020 **ICPS Conference**, *Program Committee member*.
- 2020-2021 **LASD Conference**, *Program Committee member*.

### Theses Examiner (second examiner)

- 2025 **Phd Thesis (ongoing)**, *Youssef Mahmoud*, Fault Detection & Diagnosis for Distributed Robot Systems Through Rule Induction, Institute for Artificial Intelligence and Autonomous Systems, Hochschule Bonn-Rhein-Sieg, Germany.
- 2023 **Phd Thesis**, *Arezo Bozorgmehr*, Application of machine learning in public health, Institute for General Medicine and Family Practice, University Hospital Bonn, Germany.
- 2022 **Phd Thesis**, *Daniel Kozma*, Digital Production and Supply Supported by Lifecycle Management in Industry 4.0, Budapest University of Technology and Economics.
- 2026 **Master Thesis**, *Priya Chaudhary*, Optimizing Robot Navigation Strategies for Movement in Dense Human Crowds in Public Spaces , Hochschule Bonn-Rhein-Sieg.
- 2024 **Master Thesis**, *Tammo Jung*, Implementation and Evaluation of Algorithms for Intercepting Drones, Universität zu Lübeck.
- 2023 **Master Thesis**, *Andreas Waldner*, Transfer of conventional network mechanisms to DNA-Tile-based nanonetworks, University of Luebeck.
- 2023 **Master Thesis**, *Katharina Spitzley*, MPC and PID Controller in Establishing and Maintaining Contact with a Structure using an Underactuated Quadcopter, University of Luebeck.

- 2024 **Bachelor Thesis**, *Lucas Weinknecht*, A Comparative Study of Estimating Supermassive Black Hole Masses: Linear Regression versus Deep Learning Methods, University of Luebeck.
- 2024 **Bachelor Thesis**, *Roman Schierholt*, Intelligent Guidance Mobile Robot, University of Luebeck.
- 2023 **Bachelor Thesis**, *Till Bartels*, Considerations for Analog-to-Digital Conversion at the Edge of Memristive Crossbars, University of Luebeck.
- 2023 **Bachelor Thesis**, *Max Lohaus*, Developing a Concept for a Molecular or DNA-Based Gateway, University of Luebeck.
- 2023 **Bachelor Thesis**, *Neele Kohle*, Autonomous Surveillance of Marked Objects with Application of Rumex Monitoring, University of Luebeck.
- 2023 **Bachelor Thesis**, *Neele Kohle*, Autonomous Surveillance of Marked Objects with Application of Rumex Monitoring, University of Luebeck.
- 2023 **Bachelor Thesis**, *Lukas Freiling*, Velocity and Acceleration Estimation of a Leading Vehicle Using Inverse Perspective Mapping With a Single Camera., University of Luebeck.
- 2023 **Bachelor Thesis**, *Enno Friedl*, Entwicklung und Steuerung einer Ladeplattform für einen Geländeroboter zum Ausgleichen von Störungen (Development and control of a loading platform for an off-road robot to compensate for disruptions), University of Luebeck.
- 2022 **Bachelor Thesis**, *Morris Witthein*, An Approach to Explain Deep Neural Networks through Visualization and Renormalization Groups, University of Luebeck.
- 2021 **Bachelor Thesis**, *Kristen Krohne*, Creating a Robot Controller with AdaBoost in the Use Case of the Foraging Problem, University of Luebeck.
- 2021 **Bachelor Thesis**, *Martin Ebenfeld*, Hardware Beschleunigung auf MPSoCs mit Hilfe von Docker–Dockerized Hardware-Acceleration on MPSoCs–, University of Luebeck.
- 2021 **Bachelor Thesis**, *Steffen Fleischmann*, Autonomous Parallel Parking of a Lego Car Using a LIDAR Sensor and Artificial Neuroevolution, University of Luebeck.
- 2021 **Bachelor Thesis**, *Felix Muus*, Practical Machine Learning Approach for Hardware Trojan Detection, University of Luebeck.
- 2019 **Diploma Thesis**, *Julian Müller*, Machine Learning Methods for IoT Condition Monitoring, HTW Dresden.
- 2019 **Bachelor Thesis**, *Robert Pampuch*, Development of a data driven mixed reality human machine interface, HTW Dresden.
- 2019 **Bachelor Thesis**, *Frank Kostall*, Obsoleszenzmanagement für IT Komponenten, HTW Dresden.
- 2018 **Bachelor Thesis**, *Konstantin Clemens*, Zeitreihenbasierte Anomalieerkennung für den Datenbankbetrieb, HTW Dresden.
- 2018 **Bachelor Thesis**, *Markus Weitz*, Untersuchung der Datenflüsse und Sensorik zur Ein- und Auslagerung von 300mm Reticlen, HTW Dresden.
- 2018 **Bachelor Thesis**, *Marvin Kuhnke*, Security Code Crawler for Packet Storm Security, Leibniz University Hannover.

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2018 **Bachelor Thesis**, *Christian Müller*, Security Code Exporter for GitHub, Leibniz University Hannover.

## Publications

### Peer Reviewed Journals

- [J1] 2025 **Sepideh Barekatrezaei, Ali Naderiparizi, Ehsan Kozegar, Javad Ghofrani, Mohsen Soryani**, *Breast mass classification in 3D ABUS based on Laplace-Beltrami spectra and dual path CNN*, Expert Systems with Applications.
- [J2] 2022 **Laura Seiffert, Jana Sczodrok, Javad Ghofrani, Katrin Wieczorek**, *Remote Technologies as Common Practice in Industrial Maintenance: What Do Experts Say?*, MDPI Applied Sciences.
- [J3] 2021 **Mohammad Divband Soorati, Jediah Clark, Javad Ghofrani, Danesh Tarapore, Sarvapali D Ramchurn**, *Designing a User-Centered Interaction Interface for Human-Swarm Teaming*, MDPI Drones .
- [J4] 2021 **Ali Ghasemi, Javad Ghofrani, Mohammad Divband Soorati**, *Assessment of mass segmentation methods in 3-D ultrasound images*, Computational Sciences and Engineering, .
- [J5] 2019 **Mohammad Divband Soorati, Mary Katherine Heinrich, Javad Ghofrani, Payam Zahadat, Heiko Hamann**, *Photomorphogenesis for Robot Self-assembly: Adaptivity, Collective Decision-making, and Self-repair*, Bioinspiration & Biomimetics Journal (BB-IOP).

### Peer reviewed Conferences

- [C1] 2025 **Mehrdad Asadi, Javad Ghofrani, Ann Nowé**, *Congestion-Aware Multi-Agent Path Planning for Pick-Up and Delivery Tasks*, GECCO '25: Proceedings of the Genetic and Evolutionary Computation Conference, Málaga, Spain, 2025.
- [C2] 2025 **Javad Ghofrani, Sadra Nasiri, Basil Ugbomoiko, Dirk Reichelt, Fouad Bahrpeyma**, *A state-of-the-art review of Digital Twins from the perspective of practitioners*, 2025 IEEE International Conference on Communications Workshops (ICC Workshops), Montreal, Canada, 2025.
- [C3] 2022 **Zeinab Sadat Rabani, Hanieh Khorashadizadeh, Shirin Abdollahzade, Sven Groppe, and Javad Ghofrani**, *Developers' Perspective on Trustworthiness of Code Generated by ChatGPT: Insights from Interviews*, International Conference on Applied Machine Learning and Data Analytics (AMLDA 2024), Luebeck, Germany 2024.
- [C4] 2023 **Sören Nienaber, Mohammad D. Soorati, Arash Ghasemzadeh, Javad Ghofrani**, *Software Product Lines for Development of Evolutionary Robots*, 27th ACM International Systems and Software Product Line Conference - Volume B (SPLC 23), Tokyo, Japan 2023.
- [C5] 2023 **Javad Ghofrani, Christopher Starck**, *Improving Load Balancing of Long-lived Streaming RPCs for gRPC-enabled Inter-service Communication*, 15th Central European Workshop on Services and their Composition (ZEUS 2023), Hanover, Germany 2023.

- [C6] 2022 **Javad Ghofrani, Paria Heravi, kambiz A. Babaei, Mohammad Divband Soorati**, *Trust Challenges in Reusing Open Source Software: An Interview-based Initial Study*, 26th ACM International Systems and Software Product Lines Conference (SPLC 2022), Graz, Austria 2022.
- [C7] 2020 **David Heik, Javad Ghofrani and Dirk Reichelt**, *Adaptive Management Shell for Mapping the Process Capability of Manufacturing Components: A Systematic Mapping Study*, 18th IEEE International Conference on industrial informatics (INDIN 2020), University of Warwick, UK 2020.
- [C8] 2020 **Javad Ghofrani, Kirill Loisha, and Dirk Reichelt**, *A Systematic Mapping Study on Blockchain Technology for Digital Protection of Communication with Industrial Control [Accepted]*, 18th IEEE International Conference on industrial informatics (INDIN 2020), University of Warwick, UK 2020.
- [C9] 2020 **Javad Ghofrani, Bastian Deutschmann, Mohammad Divband Soorati, and Dirk Reichelt**, *Cognitive Production Systems: A Mapping Study*, 18th IEEE International Conference on industrial informatics (INDIN 2020), University of Warwick, UK 2020.
- [C10] 2020 **Eric Brandt, Felix Brandt, Javad Ghofrani, David Heik, Dirk Reichelt**, *Domain Specific Assets: A Software Platform for Use Case Driven Human Friendly Factory interaction (Poster)*, Future Technologies Conference (FTC 2020), Vancouver, Canada 2020.
- [C11] 2020 **Eric Brandt, Felix Brandt, Javad Ghofrani, Dirk Reichelt**, *Asset Administration Shell - Domain Specific Language Approach to Integrate Heterogeneous Device Endpoints (Poster)*, Future Technologies Conference (FTC 2020), Vancouver, Canada 2020.
- [C12] 2020 **Javad Ghofrani, Ehsan Kozegar, Arezoo Bozorgmehr, Mohammad Divband Soorati**, *Reusability in Artificial Neural Networks: an Empirical Study*, Tagung Software Engineering (SE) der Gesellschaft für Informatik (GI) (SE 2020), Innsbruck, Austria 2020.
- [C13] 2020 **Robert Pampuch, Javad Ghofrani, Dirk Reichelt**, *Development Of A Mixed Reality Human Machine Interface; Concept, Design and Evaluation (Poster)*, Angewandten Automatisierungstechnik in Lehre und Entwicklung (AALE 2020), Madrid, Spain 2019.
- [C14] 2019 **Javad Ghofrani, Arezoo Bozorgmehr**, *Migration to Microservices: Barriers and Solutions*, Second International Conference on Applied Informatics (ICAI 2019), Madrid, Spain.
- [C15] 2019 **Mohammad Divband Soorati, Maximilian Krome, Marco Mora-Mendoza, Javad Ghofrani, Heiko Hamann**, *Plasticity in Collective Decision-Making for Robots: Creating Global Reference Frames, Detecting Dynamic Environments, and Preventing Lock-ins*, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2019), Macau, China.
- [C16] 2019 **Javad Ghofrani, Ehsan Kozegar, Arezoo Bozorgmehr, Mohammad Divband Soorati**, *Reusability in Artificial Neural Networks: an Empirical Study*, Second International Workshop on Empirical Experiences and Studies on Software Reuse (WEESR 2019) .

- [C17] 2019 **Javad Ghofrani, Ehsan Kozegar, Anna Lena Fehlhaber, Mohammad Divband Soorati**, *Variability in Deep Neural Networks*, Systems and Software Product Line Conference (SPLC 2019) .
- [C18] 2019 **Javad Ghofrani and Dirk Reichelt**, *Using Voice Assistants as HMI for Robots in Smart Production Systems*, ZEUS 2019 .
- [C19] 2018 **Javad Ghofrani and Anna Lena Fehlhaber**, *ProductLinRE: Online Management Tool for Requirements Engineering of Software Product Lines*, SPLC 2018 .
- [C20] 2018 **Mohammad Divband Soorati, Payam Zahadat, Javad Ghofrani, and Heiko Hamann**, *Adaptive Path Formation in Self-Assembling Robot Swarms*, DARS 2018 .
- [C21] 2018 **Mohammad Divband Soorati, Javad Ghofrani, Payam Zahadat, and Heiko Hamann**, *Robust and Adaptive Robot Self-Assembly Based on Vascular Morphogenesis*, IROS 2018 .
- [C22] 2018 **Javad Ghofrani, Arezoo Bozorgmehr and Amir Panah**, *A Fast Algorithm Based on Apriori Algorithms to Explore the Set of Repetitive Items of Large Transaction Data*, ICCDA 2018.
- [C23] 2018 **Javad Ghofrani and Daniel Lübcke**, *Challenges of Microservices Architecture: A Survey on the State of the Practice* , Zeus 2018.
- [C24] 2018 **Philipp Hohl, Javad Ghofrani, Jürgen Münch, Kurt Schneider and Michael Stupperich**, *Searching for Common Ground: Existing Literature on Automotive Agile Software Product Lines*, selected for presentation at main research track, SE 2018.
- [C25] 2017 **Javad Ghofrani, Mahdi Mohseni, Arezoo Bozorgmehr**, *A Conceptual Framework for Clone Detection using Machine Learning*, KBEI 2017.
- [C26] 2017 **Mostafa Mohammadpour, Mahdi Saadati, Seyyed Mohammad. R Hashemi, Javad Ghofrani**, *Identification using iris Image Analysis in Frequency Domain*, KBEI 2017.
- [C27] 2017 **Philipp Hohl, Javad Ghofrani Jürgen Münch, Kurt Schneider and Michael Stupperich**, *Searching for Common Ground: Existing Literature on Automotive Agile Software Product Lines*, ICSSP 2017.
- [C28] 2016 **Mahdi Mohseni, Javad Ghofrani and Hesham Faili** , *Persianp: a Persian Text Processing Toolbox*, CICLing 2016.
- [Peer reviewed Scientific Magazines](#)
- [S1] 2025 **Javad Ghofrani, Tassilo Söldner, Darian Lemke** , *Mit Digitalen Zwillingen die Zukunft der Fertigung gestalten*, GITO , Germany, 2025.
- [S2] 2021 **Javad Ghofrani and Tassilo Söldner**, *Kreislaufwirtschaft durch digitale Transformation – Die Bedeutung der digitalen Transformation für die Kreislaufwirtschaft* , Industrie40-management, .
- [S3] 2020 **Laura Seiffert, Katrin Wieczorek, Javad Ghofrani, Robert Pampuch, and Dirk Reichelt**, *Remote-Technologien in der industriellen Instandhaltung – Ein Überblick zum aktuellen Einsatz von Remote-Technologien in der Praxis* , Industrie40-management, 2020 (6), S. 59-62.

## Miscellaneous

- [M1] 2022 **Tassilo Söldner, Javad Ghofrani**, *SpringOne: Native Images, Spring Azure und Weiterentwicklungen*, Heise Online, 07.09.2021 , Developer.

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## Major Collaborations

- 2020-2024 **Project NEUPA**, *Collaboration with German Industrial partner from automotive domain (IAV) .*
- 2019-2022 **Project Arrowhead Tools**, *Major collaboration with German Industrial partners (Infineon Technologies Regensburg, Infineon Technologies Dresden, and Systema Dresden, industrial automation and semi-conductor production) and EU Consortium (Eclipse Arrowhead Community) .*
- 2018-2025 **DAAD RISE Germany Program**, *Collaboration with English speaking western countries (Offering summer internship for bachelor students from UK, USA, and Canada).*
- 2022-2025 **GUC Bachelor Students**, *Supervising and Hosting of Bachelor students from German University of Cairo (GUC) at University of Luebeck .*

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## Training Courses and Certificates

- 2024 **Questioning Assessment: how to test what students have learned?** , *Part of Training Program of University of Luebeck , Luebeck, Germany.*
- 2022 **Teamworkshop Kommuinkation**, *Accelerate GmbH , Hohwacht, Germany.*
- 2022 **Führen auf Distanz - erfolgreiche digitale Gruppenleitung**, *Part of Training Program of University of Luebeck , Luebeck, Germany.*
- 2021 **Projektleitung**, *Part of Training Program of University of Luebeck , Luebeck, Germany.*
- 2021 **CRAFTH Circular SPRINT**, *RawMaterials Academy, Clausthal University of Technology, Clausthal-Zellerfeld, Germany.*
- 2021 **Stressmanagement**, *Part of Training Program of University of Luebeck , Luebeck, Germany.*
- 2019 **Science Slam Training**, *Part of Saxony<sup>5</sup> Postdoc Program, HTW Dresden University of Applied Sciences, Dresden, Germany.*
- 2017 **Agile Entwicklung mit Scrum - die Grundideen selbst erfahren**, *Leibniz University of Hannover, Hannover, Germany.*

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## Languages

English	<b>Expert</b>	<i>Fluent in writing and speaking</i>
German	<b>Expert</b>	<i>Fluent in writing and speaking</i>
Farsi	<b>Mothertongue</b>	
Turkish and Arabic	<b>Basic knowledge</b>	

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## References

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- 4 **Germar Schneider**, Infineon Technologies Dresden GmbH, Email: germar.schneider@infineon.com .
- 3 **Prof. Rick Rabiser**, Linz Institute of Technology , Email: rick.rabiser@jku.au.  
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## Interests

- Abstract Painting
- Cooking
- Playing Electric Guitar,
- Trekking