# LEONARD TUDORACHE

PhD Candidate


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LinkedIn GitHub


## EDUCATION

### Master of Computer Science
**Eindhoven University of Technology**
2020-2023

### Bachelor of ICT & Software Engineering
**Fontys University of Applied Sciences**
2016-2020

## EXPERTISE

- C#, JavaScript, Python
- Microsoft Azure
- Azure DevOps, Git, Docker, VueJS
- Critical & Conceptual Thinking
- Communication & Teamwork
- Time Management & Planning
- Conceptual Thinking

## LANGUAGE

- English (Fluent)
- Romanian (Native)

## PROFILE

Versatile and fast-learning Software Engineer with experience across front-end and back-end development. Currently pursuing a PhD in IoT security and digital twins. Skilled in full-stack development with C#, .NET, Azure, and JavaScript frameworks. Strong background in IoT, security research, and cloud-native solutions.

## WORK EXPERIENCE

### Eindhoven University of Technology
**2023-Present**

PhD Candidate

- Contributing to the formal verification component of the ENTRUST Horizon project
- Research on Digital Twin for Additive Manufacturing, IoT, and Security
- Research on end-to-end security verification of IoT systems — from design-time specification to runtime behavior
- Instructor for the Software Design course — responsible for lecturing, mentoring students, and evaluating software architecture and design assignments

### ICT Group, Eindhoven
**Feb 2022-Jul 2022**

Intern

- Applied Reinforcement Learning on a Digital Twin to control a factory
- Deployed the Machine Learning agent on the physical model and tested real-time adaptability

### CytoSMART Technologies B.V., Eindhoven
**2019-2022**

**Software Developer**

- Integrated third-party applications into a distributed imaging system
- Developed front-end interfaces using Vue Framework for lab automation tools
- Built scalable back-end services using .NET Framework, Azure Functions, and Azure Service Bus

**Graduation Intern** **Feb 2020-Jul 2020**

- Developed full-stack solutions for a new device using Docker, Azure DevOps, and microservices
- Designed cloud architecture and implemented production-ready deployment in Azure

## PUBLICATIONS

- Tudorache, L., Babur, Ö., Lucas, S. S., & van den Brand, M. G. J. (2025). *Current approaches to digital twins in additive manufacturing: a systematic literature review.* Progress in Additive Manufacturing, Advance online publication. doi:10.1007/s40964-025-01262-7