The DefenseTech Entrepreneurial Ecosystem: Driving Security Innovation and Resilience in Europe

Summary

This project explores the emerging DefenseTech entrepreneurial ecosystem in Europe, with a specific focus on how startups, corporates, intermediaries, and governments collaborate to foster security innovation and societal resilience. The research examines the dynamics and institutional arrangements that enable or constrain entrepreneurial initiatives in the defense and dual-use technology sectors. By analyzing case studies across key European hubs and applying theories from entrepreneurship, innovation systems, and institutional theory, the project aims to deepen our understanding of how new ventures contribute to strategic autonomy and technological sovereignty in a rapidly evolving geopolitical landscape.

Research field:	Business
Supervisors:	Prof. Dr. Tarmo Kalvet
	Jan Harima
Availability:	This position is available.
Offered by:	School of Business and Governance
	Department of Business Administration
Application deadline:	Applications are accepted between June 01, 2025 00:00 and June 30, 2025 23:59 (Europe/Zurich)

Description

Main Supervisor: Research Fellow Jan Harima (PhD)

Co-Supervisor: Adjunct Professor Tarmo Kalvet (PhD)

In response to rising geopolitical tensions and evolving security threats, Europe has witnessed a surge of interest in DefenseTech—technologies that serve both military and civilian purposes. Startups and innovation-driven SMEs have begun to play an increasingly prominent role in developing cutting-edge solutions in areas such as cybersecurity, AI, drone technology, and space systems. However, the entrepreneurial ecosystem that supports such innovations remains under-researched, particularly in terms of its formation, governance, and long-term viability.

This doctoral project investigates how European DefenseTech ecosystems emerge, evolve, and contribute to national and continental security and innovation agendas. It asks how different actors—including startups, defense ministries, venture capital firms, and accelerators—interact and co-create the conditions necessary for defense-related innovation.

The PhD student will conduct in-depth qualitative research across multiple European regions, with Tallinn as one potential case, examining the institutional logics, funding mechanisms, and conflict dynamics that shape ecosystem trajectories. The project contributes to critical debates on innovation sovereignty, strategic autonomy, and the role of entrepreneurship in the new security landscape.

Responsibilities and (foreseen) tasks

- Design and implement a rigorous qualitative research strategy including multi-site case studies in Europe.
- Contribute to academic literature through at least three peer-reviewed publications in internationally recognized journals.
- Participate in the research, teaching, and supervision activities of the Department of Business Administration.
- Collaborate with interdisciplinary research teams across TalTech and partner institutions.
- Apply for additional research funding and contribute to ongoing projects in entrepreneurship and innovation policy.
- Participate in the research and practitioner workshops where project findings are presented and discussed.
- The candidate is also expected to engage in small-scale teaching and supervision related to a PhD candidate's field of expertise and active participation in the department's activities.

The candidate is expected to have

- Strong research and analytical skills, particularly in qualitative research methods.

- A Master's degree in entrepreneurship, innovation, public policy, security studies, economic geography or a related social science discipline.
- Fluency in English; knowledge of Estonian and other European languages is a plus.
- Demonstrated interest in topics related to entrepreneurship, innovation ecosystems, and/or security technologies.
- Capacity to work independently and collaboratively in an interdisciplinary and international environment.

The following experience is beneficial

- Previous research experience and/or publications
- Experience in working with qualitative research methodology

The initial research plan

The candidate should submit an initial research plan for the topic, including the overall research and data collection strategy. The candidate can expand on the listed research questions and tasks and propose theoretical lenses to be used. The research plan will be developed further considering project aim and research questions as well as ongoing project activities once the candidate is admitted.

We offer

- 4-year PhD position (employed as an Early-Stage Researcher at the Department of Business Administration) in a strong team of researchers.
- The chance to do high-level research in one of the most dynamic sustainability contexts globally.
- Opportunities for conference visits, research stays and networking with leading universities and research centres in the fields of energy, environmental and innovation studies.
- All PhD positions are guaranteed a gross income of at least 2300 EUR and Estonian national health insurance.

About TalTech and about the department

Tallinn University of Technology (TalTech) is an international scientific community with approximately 9,000 students and 2,000 employees; it is one of the largest universities in Estonia, the leading EU country in digitalisation. The university's strengths are broad multidisciplinary study/research interests, a modern research environment, and strong collaboration with international educational and research institutions. TalTech is aiming to be an organisation leading the way to a sustainable digital future.

TalTech, as an employer, brings together representatives from a wide range of disciplines - engineers and economists, business and biotechnology, and data scientists - with a shared mission to develop Estonian higher education and research. Keywords that characterise TalTech today are rapid development, interdisciplinarity, and internationalisation. The university has an international working environment; the functional languages are English and Estonian.

The research carried out at the **Department of Business Administration** in the School of Business and Governance in TalTech deals with various aspects of business – entrepreneurship, sustainability, knowledge and technology transfer, operations and strategic management, digitalisation, marketing, supply chain management, accounting and performance management. The School has over 200 employees.

TalTech has a green and one of Europe's most compact university campuses, including the Tehnopol Tallinn Science Park. Low hierarchy, academic freedom and a balanced work and family life are valued at TalTech. The university

provides individual development and training opportunities, material and non-material tokens of acknowledgement, sporting opportunities at TalTech Sports Club and all-staff activities.

Additional information

For further information, please contact Jan.Harima@taltech.ee and Tarmo.Kalvet@taltech.ee and visit https://taltech.ee/en/department-business-administration and https://taltech.ee/en/phd-admission

List of crucial references

A list of potentially relevant authors and theoretical approaches to be considered for the specified PhD research plan:

- Harima, A., Harima, J., & Freiling, J. (2024). Ecosystem orchestration: Unpacking the leadership capabilities of anchor organizations in nascent entrepreneurial ecosystems. *Entrepreneurship Theory and Practice*, *48*(6), 1404-1450.
- Shi, X., & Shi, Y. (2022). Unpacking the process of resource allocation within an entrepreneurial ecosystem. *Research Policy*, *51*(9), 104378.

- Spigel(2017)_The relational organization of entrepreneurial ecosystems
- Spigel, B., & Harrison, R. (2018). Toward a process theory of entrepreneurial ecosystems. *Strategic entrepreneurship journal*, *12*(1), 151-168.
- Wurth, B., Stam, E., & Spigel, B. (2022). Toward an entrepreneurial ecosystem research program. *Entrepreneurship Theory and Practice*, *46*(3), 729-778.
- Xu, L., Yang, S., Liu, Y., Newbert, S. L., & Boal, K. (2023). Seeing the forest and the trees: Exploring the impact of inter-and intra-entrepreneurial ecosystem embeddedness on new venture creation. *Academy of Management Journal*, *66*(6), 1954-1982.

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