Responsible and Ethical AI in Service Development and Delivery

Summary

This PhD project explores the intersection of responsible artificial intelligence (AI) in high-contact, human-centered services such as education, healthcare, banking, etc. As AI becomes integral across service sectors, ethical concerns have emerged as the most significant theme for practitioners and researchers. This project aims to understand how AI technologies are being ethically integrated into service design and delivery. Some examples include the use of AI in personalized learning, admissions, and student evaluations, AI-driven diagnosis and treatment recommendations, and AI in sensitive personal financial data handling, highlighting AI's criticality in consumers' trust, safety, and privacy. This research emphasizes AI-enabled services' ethical, social, and operational impacts on customers. The research will advance knowledge of AI-enabled, responsible service design and delivery that enhances customer experiences while ensuring fairness, transparency, and accountability. The societal and managerial implications of the research will provide frameworks to service providers to build trust through fairness, transparency, and responsibility while delivering AI-enabled services.

Research field:	Business
Supervisors:	Susanne Durst Aditi Sarkar
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: Assistant Professor, Aditi Sarkar (PhD)

Co-Supervisor: Adjunct Professor, Susanne Durst (PhD)

This research investigates how responsible and ethical AI can support the development and delivery of services across various sectors, with an illustrative focus on educational services (e.g., AI in classroom teaching and university support systems). Based on relevant theories such as the dynamic capability theory and recent findings (e.g., Kumar et al., 2024), this PhD project will study how organizations balance technological adoption with ethical considerations and customer-centric service innovation. Areas of interest include AI-driven personalization, automated decision- making, service innovation processes, ethical governance structures, and responsible management. The PhD candidate will engage in qualitative and/or mixed-methods empirical research, collaborate with industry stakeholders, and contribute to both academic theory and managerial practice.

This PhD topic addresses national and EU-wide strategic priorities on digitalization, AI ethics, and service innovation. As Estonia positions itself as a digital society, understanding how AI can be responsibly and ethically

deployed in key service industries (like education, public sector, and finance) ensures sustainable innovation and public trust. The research aligns with TalTech's vision on digital transformation and the Department's expertise in marketing, service development, and responsible innovation. It will contribute to capacity-building in AI governance and support Estonia's competitiveness as a leader in ethical digital services.

Responsibilities and (foreseen) tasks

- Design and conduct independent research on responsible and ethical AI applications in services marketing
- Carry out empirical studies such as experiments in the service sectors
- Develop and publish peer-reviewed journal articles and present at international scientific conferences
- Collaborate with service firms, universities, and ethical AI organizations
- Contribute to ongoing research projects at the Department of Business Administration
- Participate in doctoral training and departmental activities

The candidate is expected to have

-
- A Master’s degree in Marketing, Business, Information Systems, Service Design, or related fields
- Strong interest in responsible innovation, digital ethics, and service development and management
- Willingness and commitment to develop the necessary skills and competences to design and conduct independent academic research at the doctoral level
- Conduct qualitative/quantitative data analysis
- Excellent written and spoken English communication skills

The following experience is beneficial

- Demonstrated prior exposure to AI/ML concepts or applications in business
- Demonstrated experience with empirical research methods (e.g., interviews, surveys, experiments, case studies)
- Familiarity with service marketing or service design literature
- Academic writing and publication experience

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.
- Opportunities for conference visits, research stays and networking with leading universities and research centres
- All PhD positions are guaranteed a gross income of at least 2300 EUR and Estonian national health insurance.

About the department

TalTech is an international community with 9,000 students and 1,800 employees, making it one of Estonia’s largest universities and a leader in EU digitalisation. The university boasts multidisciplinary research, a modern environment, and strong international collaboration. Its green, compact campus includes the Tehnopol Science Park and the Mektory Innovation Center, which supports research funding and business expertise. TalTech values low hierarchy, academic freedom, and work-life balance, offering development opportunities, recognitions, and recreational activities, including a sports club and all-staff events. TalTech as an employer brings together representatives from a wide range of disciplines – engineers and economists, business and biotechnology, and data scientists – with a common 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, and the working languages are English and Estonian.

TalTech School of Business and Governance (SBG) offers interdisciplinary education in economics, international business management, and law, fostering innovation in a diverse community with 18% international students from 60 countries. Influential alumni in Estonian politics and business reflect our commitment to quality education. The faculty includes globally recognized researchers and practitioners, with nearly 30% having an international background. SBG, with over 200 employees, conducts research on modern business aspects—entrepreneurship, technology transfer, strategic management, marketing, supply chain, accounting, digitalisation, sustainability, and more—focusing on individual and organizational performance. Our department is known for its strong team spirit and engaging events, large scale teaching in all levels and growing research activities. In the international ranking of Times Higher Education, TalTech's School of Business and Governance has climbed a hundred places in the last year and is now ranked 301-400 among the world's best in business and economics.

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.

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 Aditi.Sarkar@taltech.ee and Susanne.Durst@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:

Huang, M.-H., & Rust, R. T. (2018). Artificial Intelligence in Service. Journal of Service Research, 21(2), 155–172. https://doi.org/10.1177/1094670517752459

Huang, M.-H., & Rust, R. T. (2021). Engaged to a Robot? The Role of AI in Service. Journal of Service Research, 24(1), 30– 41. https://doi.org/10.1177/1094670520902266

Kumar, V., Ashraf, A. R., & Nadeem, W. (2024). AI-powered marketing: What, where, and how? International Journal of Information Management, 77, 102783. https://doi.org/10.1016/J.IJINFOMGT.2024.102783

Nguyen, T.-M., & Malik, A. (2022). Impact of knowledge sharing on employees' service quality: the moderating role of artificial intelligence. International Marketing Review, 39(3), 482–508. https://doi.org/10.1108/IMR-02-2021-0078

To get more information or to apply online, visit https://taltech.glowbase.com/positions/992 or scan the the code on the left with your smartphone.