

Dear Members of the Admission Committee,

I am writing to express my sincere interest in becoming a full-time student in the Software Engineering master's programme at the University of Tartu. The opportunity to delve into the realms of enterprise systems and embedded real-time systems under the guidance of esteemed faculty from both the University of Tartu and TalTech is immensely appealing to me.

I am a third-year student currently pursuing a Bachelor's degree in Computer Science at Tartu University and I will soon be completing my undergraduate studies. My interest in software engineering was sparked by a deep curiosity and a desire to create impactful solutions in the IT industry. My recent work experience as a software developer has further enhanced my passion for taking on large-scale projects. It is this enthusiasm for transformative projects that motivates me to apply to your esteemed program.

Regarding the choice of specialisation, I am inclined towards Enterprise Software. While I am passionate about the technical intricacies of software development, I also recognise the immense value that expertise in enterprise systems can bring to my journey. Understanding the complexities of enterprise systems not only enhances my technical capabilities but also provides valuable insights into how technology can effectively address business needs and drive innovation. Also, I firmly believe that mastering enterprise software development will enhance my technical capabilities and equip me with the entrepreneurial acumen necessary to potentially establish my own IT enterprise in the future. Nevertheless, I remain intrigued by the possibilities offered by the Embedded Software domain. The prospect of developing software for various modes of transport, especially within the automotive industry, resonates strongly with my long-standing interests and current hobbies.

My journey as a developer began before my bachelor's course, as I ventured into constructing various websites using WordPress CMS. This initial foray into web development laid the groundwork for my subsequent academic pursuits. Throughout my bachelor's in computer science, I dedicated myself to mastering Java and the object-oriented paradigm of programming and have created

numerous sandboxes to discover the possibilities of the language, experimenting with different frameworks, APIs, and libraries such as Spring, Hibernate, JPA, Jackson, JAXB, Mockito, and JUnit, among others. These experiences have equipped me with the expertise needed to develop robust and efficient restful APIs, which I have primarily focused on during my academic and professional endeavours.

Moreover, I have broadened my horizons by delving into other programming languages such as Scala, C++, Python, SQL, JavaScript, and TypeScript. These explorations have provided invaluable insights into the underlying principles of diverse high-level languages, enhancing my adaptability and skills. Furthermore, I have tried the functional programming paradigm with the Idris language.

In addition to my language proficiency, I have gained practical experience in database management, particularly with PostgreSQL and Oracle databases with its PL/SQL procedures. I am also adept at using tools such as Postman for API testing and have experience working with Linux-based operating systems.

On the non-technical front, I excel as a team player, demonstrating proficiency in leadership roles and adeptness in managing small teams effectively.

Throughout my undergraduate studies, I consistently maintained a GPA above 4, a testament to my unwavering dedication and perseverance. Moreover, my interests extend beyond the confines of the IT sphere, allowing me to grasp the business logic of applications from diverse perspectives. I am purposeful and motivated, always eager to expand my knowledge and skills in the ever-evolving field of software engineering.

My practical experience began in university. One of the most noteworthy projects is a plagiarism detector for the Python language during which I collaborated with a team of three individuals. This project presented significant challenges, particularly in the theoretical aspects, as it required a deep dive into the semantics of Python's built-in AST package for parsing code into an Abstract Syntax Tree (AST). The open-source code repository for this project is accessible at <https://github.com/ArR4e/DSProject>.

At the end of my second year of bachelor's studies, I secured an internship with Cybertetica, which seamlessly transitioned into a full-time position at the Taxes and Customs department. In this role, I actively contribute to the development of e-Estonia, specialising in the digitisation and automation of the Estonian Export System. Moreover, I had a noteworthy solo project involving implementing modifications to the Tax system in response to a VAT increase in Estonia and much more.

In conclusion, I am eager to embark on this transformative journey at the University of Tartu's Software Engineering master's programme. The vibrant community and the opportunity to be part of the new faculty building are particularly appealing to me. I firmly believe that an enriching learning experience is not only about a well-structured curriculum but also about the environment in which learning takes place, which Tartu University provides exactly. I am confident that my blend of technical proficiency, problem-solving acumen, and passion for innovation will not only enrich my learning experience but also contribute positively to the academic community.

Thank you for considering my application. I am eagerly looking forward to the opportunity to contribute to and learn from the vibrant academic environment at the University of Tartu.

Sincerely,

Mykyta Voievudskyi