Motivation letter

My name is Alexey Grigorev, and as a graduate I apply to the **Erasmus Mundus Master's Program in Data Mining and Knowledge Management (DMKM)** for the fundamental study of Data Mining and related aspects such as Data Analysis, Machine Learning and Statistical Modeling. I am fully qualified for the program, and with my strong academic and professional background I am a good match for the scholarship. Not only is the curriculum attractive for me, but the general idea of the Erasmus Mundus program of cultural exchange trough mobility and academic cooperation is also appealing.

Academic background

In 2006 I entered Far Eastern State Academy for Humanities and Social Studies (now Priamurian State University) in the city of Birobidzan, Russia, to study computer science and in 2010 I graduated with honors and received bachelor's degree. The courses I took were chiefly devoted to database design for enterprises: Data Management, Theory of Information Processes and Systems, Corporate IT Systems and so on. However, the disciplines I was mostly interested in were Mathematical Analysis, Probability and Statistics and Statical Analysis of Time Series.

From the beginning of my learning I realized the importance of the English language and enrolled in an advanced training of English. Although studying simultaneously for two programs was hard, in 2011 I graduated with a diploma, which is equivalent to a bachelor's degree, and now I am allowed to teach the language in general education institutions.

Apart from studies, I was actively engaged in many extracurricular activities. I spoke at several conferences, such as "Programmer 2009", "Programmer 2010" and 57th Far Eastern Scientific Collegiate Conference. From 2007 to 2010 I annually was a part of PSU's team in Far Eastern Quarter Finals of Collegiate Programming Contest held by ACM. In 2007 and 2008 I participated in mathematical contests, where in 2008 I showed the best result amongst all PSU participants. Finally, in 2010 I competed in individual nation-wide programing contest where I ranked 4th among participants form Far Eastern region of Russia.

My achievements in studying and extracurricular activities did not go unnoticed and as a recognition I received a prestigious governmental award for talented youth.

However, among all the tournaments I have partaken in the most memorable was "the best graduate" contest in my Alma Mater between PSU's graduates from all faculties. I wanted to prove that I was able to succeed despite all difficulties. In the finals I faced highly competent and competitive rivals, all with high chances of taking the first place, but I persevered, and in the end I managed to win by a narrow margin. It showed that if I set a goal and work hard, I am able to achieve it.

Professional background

Upon graduation I decided to take a break from studying. There were two reasons for this: firstly, I wanted to acquire more practical knowledge, and secondly, I was driven by desire to find out which particular field is more interesting for me as well as more appealing for business. I moved to Nizhniy Novgorod where I worked for several companies as a software developer.

The first company was developing a system for robotizing e-commerce warehouses, and in the second one we were responsible for creating a system for selling ringback tones (melodies you hear in the background when you are calling to a mobile phone). Those companies were quite different, but there was something that they have in common. Namely, they both needed to process large volumes of data efficiently, quickly adapting to the needs of customers, whether it be putting complimentary goods on the same rack or suggesting a tone which a customer is likely to buy.

Now I am working in Poland for an investment bank. Trades from many markets have to be processed and booked for commission calculation, and the goal of our team is to ensure that the

resulting charge is accurate. I am able to see that financial institutions have to deal with large volume of information, every day processing billions and billions of trades. It also proves that data analysis is crucial, and now I realize that I want to concentrate further on this subject.

I do my best not to be limited only by the scope of work, and I have actively contributed to open source. I firmly believe in freedoms and benefits of open source software, and my most significant contribution was playing a team lead role in "jtalks.org" project. Its main goal was to enhance the underlying engine for the web-site of Russian-speaking Java community, but the more people joined the project, the more ideas appeared, and I was delighted to be at the center of this development. Participation in open source is rewarding: it has given me connections, skills in building enterprise-level applications from scratch and experience in recruiting and mentoring.

What is more, I understand the value of sharing knowledge and keep a professional blog where I post all my thoughts around IT, be it a review of a new technology, summary of a book or a technical article. It started as a place where I could keep notes just for myself, but eventually it evolved into a web site, every day visited by around a hundred of people. Sometimes I receive requests for help from my visitors, and for me it means that they have confidence in my experience and knowledge.

Study objectives

Trough my working experience I have gained a significant insight into the needs of business. From my point of view, in the not too distant future data scientists – programmers with data mining skills and good knowledge of statistics – will be in increasingly high demand. The main reason for this is that over the last decades enterprises have accumulated prodigious amounts of information, and each year the number of data doubles. Hence, such professionals will be needed desperately to put this data in order.

I am particularly eager to become a data scientists, and in the future I would like to focus on the following areas: data mining, data warehousing and advanced statistics. While I am constantly learning and self-improving, it is not enough, and I feel a certain lack of skills. For that reason, in order to be successful in these fields, a good university education is needed, and such a remarkable master program will definitely help me reach my goals.

Therefore, I am highly motivated to take the courses **DMKM** provides, because the curriculum fits my educational objectives perfectly. I am especially willing to develop modeling skills and strengthen further data mining skills, and that is why I would like to choose **Data Mining and Complex System Modeling** specialization for the second semester and **Statistical Modeling and Data Mining** specialization for the third.

Additionally, I am deeply interested in cultural exchange: traditions, art, and local cuisine really appeal to me, and with this program, I will be able to immerse myself in French and Spanish cultures. Architecture is my favorite form of art, and I will definitely explore the Loire Valley in France and see the Sagrada Familia church in Barcelona. Moreover, it will give me an exciting opportunity to learn French and Spanish. Both languages sound equally attractive for me, and I hope to reach at least lower intermediate level of proficiency in both.

Upon finishing the program I plan to pursue PhD and combine professional and teaching activities. The qualification obtained through the studies will allow me to easily enroll in any doctoral program, and I am specifically interested in researches conducted by Université Libre de Bruxelles and Poznań University of Technology. Teaching is also important for me, because besides building my career I am enthusiastic about sharing my experience and knowledge with others.

To summarize, with my strong academic background, relevant working experience and a constant desire for acquiring knowledge, I am confident that I am qualified and able to perform well in this program.

Thank you very much for considering my application. I am looking forward to your positive response.