

Mateusz Gasior

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PERSONAL STATEMENT

A challenge driven and innovative programmer, interested in overall computer science and software design. Exhibits strong analytical abilities and logical thinking reinforced by academic and work experience. MSc graduate of Cranfield University, UK and Silesian University of Technology, PL. Instinctive team worker, with creative ideas supported by technical knowledge. Interested in high performance computing, programming languages and paradigms. Creative, innovative and capable of working in big development teams. Software developer with 2 years' experience, gained in Polish and British companies. Constantly looking for challenges and improvements. Dedicated and hardworking person with huge commitment to the work.

KEY ACHIEVEMENTS

- Awarded 14,000 GBP scholarship to Cranfield University 2016/2017 for Computational and Software Techniques in Engineering on the Software Engineering for Technical Computing option.
- Awarded 34,500 PLN scholarship for participation in project ZIP at Silesian University of Technology, Poland in years 2012-2016. Scholarship granted in recognition of academic achievements.
- Designed and implemented system for acquisition and preliminary analysis of user computer activity as a bachelor's degree thesis topic.
- Participated in two mentoring projects in cooperation with Silesian University of Technology, as well as Bombardier Transportation Poland and EgzoTech companies.

EDUCATION

MSc in Computational & Software Techniques in Engineering (Double Diploma), Software Engineering for Technical Computing: Cranfield University, Cranfield, UK (September 2016 – September 2017) (First Class Honours)

- **Modules includes:** C++, Computational Methods, Requirements Analysis and System Design, Cloud Computing (AWS), Small Scale Parallel Programming (CUDA and OpenMP), Advanced Java, High-Performance Technical Computing, Management for Technology
- **Group Design Project:** Applications in Practical High-End Computing:
Working in an international group of 5 people on simulation software as a programmer. Responsibilities included specifying overall program architecture, coding and managing project's VS Team Services platform. Project involved improving easiness of usability, performance and architecture as well as extending features of software. The core of the application has strongly used CUDA technology.
- **Individual Thesis:** Optimised simulation of reduced aeroelastic systems:
Project aimed to redesign a CA2LM framework able to simulate in approximation a flexible aircraft model of reduced complexity. Tool is strongly utilised by researchers at Cranfield University. Task required to explore scope for improvements in simulation run-times and design new engineering interfaces to improve learning curve of the framework (MATLAB and Simulink). Final results yielded 2-fold speed improvements for post-processing tool which became a new main real-time animation, new user-friendly interface and modular, maintainable software, while preserving existing framework capabilities.

MSc in Informatics (Double Diploma): Silesian University of Technology, Faculty of Automatic Control, Electronics and Computer Science, Gliwice, Poland (March 2016 – September 2017) (Very good with distinction)

- **Modules includes:** Algorithms and Data Structures, Analysis and Design of Information Systems, Performance Evaluation of Computer Networks/Computer Systems, Software Development in a Changing Business Environment, Computer Vision and Image Recognition (MATLAB), Introduction to Compilers.

BSc in Informatics, Computer Graphics and Software: Silesian University of Technology, Gliwice, Poland (October 2012 - January 2016) (Very good)

- **Modules includes:** Programming in C/C++, Calculus and Linear Algebra, Discrete Mathematics, Algorithms and Data Structures, Numerical Methods, Databases, Assembler, Concurrent Computing (ADA), Microprocessor and Embedded Systems, Operating Systems, Computer Networks, Biologically Inspired Artificial Intelligence, Rule-based Artificial Intelligence Systems, Computer Architecture (CUDA, JavaSpaces, PVM), Java and Programming in the Internet, Computer Graphics
- **Individual Thesis:** System for acquisition and preliminary analysis of user computer activity:

Designed to monitor user's computer activity on the Windows-based environments. System had a pluggable architecture capable of gathering information about currently used desktop applications and visited websites. Additionally, system was constantly monitoring usage of the hardware resources such as CPU, GPU and memory. Thanks to preliminary analysis of the data user could manually see the trend of his actions. Pluggable architecture of the solution provided an opportunity to write third party extensions. Project required to adapt multiple technology. This project initially was written using .NET, C#, Microsoft SQL Server rewritten later in Java, NodeJS and MySQL.

CAREER HISTORY

Titian Software Ltd.: London, United Kingdom – Software Engineer (August 2017 – Present)

Founded in 1999, Titian Software specializes in sample management, offering software products and consultancy services to improve the efficiency, throughput and integrity of sample libraries. Its industry-renowned Mosaic software optimizes the storage, processing, tracking, and ordering of diverse sample types, including compounds, biologicals and reagents, for small or large sample collections.

- Designed many different Oracle PL/SQL components and optimized many procedures handling the processing of big data (~2.5 – 3 million per set)
- Designed and implemented a backup strategy for Oracle database and synchronization with AWS S3
- Designing cloud infrastructure (AWS) for a Cloud Printing schema.
- Integrating with third party printer drivers using BarTender Software.
- Creating a low-latency, low-bandwidth, full-duplex services using SignalR framework
- Being a member of internal TFS Reorganisation Team in a role of Scrum Master

Comarch S.A.: Katowice, Poland - Junior Java Developer (August 2015 - March 2016)

Comarch is a global provider of IT business solutions that aim to optimize operational and business processes. Since its inception in 1993, the company has developed at a rapid pace. Today, Comarch is the leading IT company in Central & Eastern Europe and employs over 5000 experienced IT engineers and business consultants.

- Creating, developing and maintaining airline loyalty systems for big companies within 20 – 30 people team.
 - Creating database structure, stored procedures and SQL Scripts for Oracle Database, i.e. Transaction storing and gathering routines.
 - Developing services using Enterprise Java Beans (EJB) architecture for different type of transactions within system.
 - Creating views using different Java Script frameworks for administration and customer purposes.
 - Maintaining code responsible for integration with payment gateways.
 - Designing and preparing Extract-Transform-Load tasks for existing application architecture with external systems.
 - Communicating with clients via emails detailing requirements, being involved in technical meetings.

LGBS Software: Gliwice, Poland - Internship as Junior C# developer (July 2014 - September 2014)

Founded in 2005, having circa 500 employees, multinational Information Technology consulting and software development company. Their mission is to provide outstanding IT services - including advanced programming and software design work.

- Developing desktop billing applications for small companies in 10 people team using Scrum methodology.
- Calculating bills based on pricing plan based on collected data from external devices (readings from meters).
 - Designing database structure using and creating SQL Scripts for Microsoft SQL Server.
 - Designing and implementing services for application using WCF Services.
 - Implementing views for desktop application using Telerik WinForms libraries in C#.

SKILLS, INTERESTS AND EXTRACURRICULAR ACTIVITIES

- **Languages:** Fluent English and native Polish.
- **IT Skills:** Confident IT user. Experience in C, .Net, WinForms, MVC, Java, C/C++, LaTeX. Experience in working with Oracle, PostgreSQL, MSSQL databases. Knowledge of scripting languages: PowerShell, bash. Basics in NodeJS. Familiar with scientific languages Python, MATLAB, R. Academic experience in Nvidia CUDA platform. Experience with Windows and Unix-based operating systems, especially Fedora and Ubuntu. Programming IDE: Visual Studio, IntelliJ IDEA, PyCharm, NetBeans, Atom. Familiar with Git, TFS and SVN. Huge fun of TDD and good programming practices and paradigms. Familiar with MPI, OpenMP and parallel computing.
- **Professional/Technical training:**
 - Microsoft Database Administration Fundamentals 98-364
 - Microsoft Specialist: Programming in C# 70-483
- **Individual Interests:** Passionate about trending technologies and high-performance computing. Willing to learn new algorithms and new ways of storing data. Programming polyglot. High fun of tech events all around the world.
- **Organisational skills:** Good at brainstorming and working as part of diversified teams with Agile methodologies, including Scum and Kanban. Familiar with TFS and Jira project management software.