

MACIEJ KUREK

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EDUCATION:

2010-13 **PhD Computing, Imperial College London**

Part of the Imperial College Custom Computing Group, supervised by Prof. Wayne Luk and Prof. Paul Kelly. Focusing on applying Meta-heuristics and Machine Learning techniques to the FPGA application design process.

2006-10 **MEng Computing, Imperial College London**

Subjects taken: Related to Computer Systems/Architecture/Compilers, Computer Modeling and Numerical Methods

- Was awarded: 1st (some notable > 80%) Quantum Computing, Compilers, Simulation and Modeling
 - Distinguished final year project (Published at SPL 11' IEEE conference)
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WORK EXPERIENCE:

2011 **JPMorgan Chase, Quantitative Research - Credit Hybrids and Exotics Desk – Internship – London**

- Member of the FPGA acceleration team lead by Stephen Weston.
- Developed and integrated a number of testing utilities for the FPGA risk calculation application.
- Extended risk calculation application with a sqlite3 database and optimized it for high volume data and low latency aggregations.
- Analyzed JP Morgans analytic library yield curve bootstrapping function, and initialized FPGA acceleration work on the underlying algorithm.
- Cooperated with Sybase and ThinkFusion on new risk visualization system.

2009 **Maxeler Technologies, Applications Acceleration Team – Internship – London**

- Gathered and analyzed requirements, produced functional and technical specifications, and provided estimates for several projects.
- Initiated the design process, holding meetings, and iterating specifications and other documents to establish an initial design and communicate it to those involved.
- Key member of the development team, present from inception through to go-live for two demos (for Finance and Oil industries).
- Involved in debugging and testing of an HDL compiler.

2008-12 **Imperial College London – Teaching Associate**

- Ran once a week tutorials for a group of 6 students.
 - Tutorials covered Reasoning About Programs, Logic, Discrete Maths and Computer Architecture courses.
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EXTRACURRICULAR ACTIVITIES AND LEADERSHIP:

2009-10 **Publicity officer, Captain of Imperial College American Football Club**

- Looked over the work of the executive committee
- Involved in securing a £3,500 sponsorship
- Responsible for marketing the club
- Developed and recruited players

2008-9 **Founder, Vice-President and Captain of Imperial College American Football Club**

- Set up a new sports society, involved in securing a £5,000 Imperial College Union grants
- Managed 30 members
- Created an executive committee for the years to follow
- Organized trainings and coaches

LANGUAGES: Polish (native), English (fluent), German (learning), Russian (learning)

SPORTS AND INTERESTS: Diving (Advanced Open Water Diver), Sailing, Sky Diving, Military technologies, American Football, Sports Science, Human Physiology

IT SKILLS:

- C, C++, Java , Fortran
- Javascript, HTML, CSS, XML, AJAX, SQL, PHP
- Adobe Photoshop, Eclipse, Matlab
- x86 and MIPS assembler
- VHDL, FPGA programming
- Mixed language programming, mainly C/C++ and C/Fortran