

Maciej P. Kopec

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Education

- 2015–2016 **PhD**, *AGH-UST*, Cracow.
Major: **Physics** at Faculty of Physics and Applied Computer Science
- 2014–2015 **MSc**, *AGH-UST*, Cracow, 5.0.
Major: **Technical Physics** at Faculty of Physics and Applied Computer Science
- 2010–2014 **BSc**, *AGH-UST*, Cracow, 4.5.
Major: **Technical Physics** at Faculty of Physics and Applied Computer Science

Professional experience

- December 2014 – present **Beam diagnostics and Instrumentation Specialist**, *National Synchrotron Radiation Centre 'Solaris'*.
- Electronic readout and measurement systems design.
 - Design for manufacture and cases.
 - Electronic prototyping.
 - Electrical reworking.
 - Beam instrumentation diagnostics and assembly.
 - Beam diagnostic equipment design and maintenance.
- May 2016 – August 2016 **Embedded systems developer**, *Organisation Européenne pour la Recherche Nucléaire (CERN)*.
- Development of 1G ethernet link on ZC706 evaluation board using Zynq SoC
 - Detector readout systems testing and debugging
 - Setting up development environments for detector readout systems
- January 2014 – June 2014 **Hardware development intern**, *Woodward Poland sp. z o.o.*
- Electrical circuit design.
 - Reworking and servicing PCB prototypes (e.g. soldering under a microscope, test setup preparation).
 - Measurements and data analysis.
 - RoHS directive compliance verification.
- July 2013 – August 2013 **Electrical engineering trainee**, *Faculty of Physics and Applied Computer Science*.
- Programming microcontrollers with ARM Cortex-M3 core.
- 2008–2013 **Web-developer**, *Back-end and front-end web development*.
- Preparing graphic files for HTML and CSS coding.
 - HTML, CSS and jQuery front-end development.
 - Preparing custom templates for Wordpress.
 - Writing plugins and snippets for CMS systems (Wordpress, Joomla).

Courses and certificates

In progress Advanced Hardware Design

FEDEVEL Academy

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| In progress | Advanced PCB Layout Course | <i>FEDEVEL Academy</i> |
| December 2016 | Learn Altium Essentials | <i>FEDEVEL Academy</i> |
| April 2016 | PCB design at RF — multi-Gigabit transmission, EMI control and PCB materials | <i>Cadence GmbH</i> |
| April 2016 | Essential high-speed PCB design for signal integrity | <i>Cadence GmbH</i> |

Last year publications

As a corresponding author

- *Universal digital aggregator for in-line signal processing*, M.P. Kopeć et al., IPAC 2017

As a co-author

- *Performance of Solaris storage ring*, A.I. Wawrzyniak et al., IPAC 2017
- *Beta function measurement in the Solaris storage ring*, A. Kisiel et al., IPAC 2017

University and private projects and designs

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| July 2014 – | Master thesis. |
| Sptember 2015 | Subject: Control interface for SALT ASIC for LHCb detector tracker upgrade |
| | ◦ Hardware I ² C interface implementation in Verilog. |
| July 2013 – | Bachelor thesis. |
| October 2013 | Subject: Demo application for colour touchscreen working in embedded system |
| | ◦ Design and implementation of GUI library for LPC1768 microcotroller with a demo application. |

Languages

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|--------------|--------------|-----------------------------|
| English | Fluent (FCE) | |
| Russian/ | Basic | |
| Japanese/日本語 | Basic | <i>Learning in progress</i> |

Other skills

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| Programming languages | C, C++ (basic), Python, Verilog, SystemVerilog, VHDL, SQL (more than basic), MATLAB (basic), Simulink(basic) |
| Design software | KiCad, EAGLE 6 (schematic and layout), Altium Designer, LTspice IV, Xilinx ISE, Xilinx Vivado (more than basic), Xilinx SDK (basic), Keil uVision, Atmel Studio, Eclipse |
| Other software and technologies | Linux, L ^A T _E X, git, Wordpress, MS Office |
| Additional qualifications | SEP 1 kV license, driving license, good knowledge of circuits and signals theory, coping with analytical problems |

Interests

- volleyball, cycling, books, snooker, e-sports, physics.

Disclaimer

I hereby authorize you to process my personal data included in my job application for the needs of the recruitment process in accordance with the Personal Data Protection Act dated 29.08.1997 (uniform text: Journal of Laws of the Republic of Poland 2002 No 101, item 926 with further amendments)