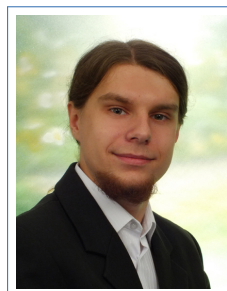*Idalińska 18A/1*
26-600 Radom
📞 *+48 515 083 938*
✉ *maciejpkopec@gmail.com*
Born in Iłża

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Brogi 40/107
31-431 Kraków

Maciej P. Kopeć

Education

2014–2015	**Master of Science**, *AGH-UST*, **Cracow**.
	Major: **Technical Physics** at Faculty of Physics and Applied Computer Science
2010–2014	**Bachelor of Science**, *AGH-UST*, **Cracow**, *4.5*.
	Major: **Technical Physics** at Faculty of Physics and Applied Computer Science
2007–2010	**4th High School, Radom** *Specialization: mathematics and physics*

Professional experience

January 2014 – June 2014 — **Woodward Poland sp. z o.o.** *Hardware development intern*

- 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 — **Faculty of Physics and Applied Computer Science** *Electrical engineering trainee*

- Programming microcontrollers with ARM Cortex-M3 core.
- ADC chip parameters measurement.

2007 – 2012 — **Freelance** *Web programmer*

- Creating web applications and websites for private customers and companies.

August 2011 – January 2012 — **Afresh Media sp. z o. o.** *Web programmer*

- Creating, modifying and designing web solutions for company's clients.

2010 – 2012 — **AGH Students Council** *Web programmer*

- Creating, maintenance and modifying various websites and web applications.

2007 – 2010 — **4th High School in Radom** *Website administrator*

- Responsibility of creating, updating and maintenance of school's web page.

Projects and designs

2014–2015 — **Control interface for SALT ASIC for LHCb detector tracker upgrade** *Master thesis*

- Hardware I^2C interface implementation in Verilog. (Work in progress)

2014 — **Demo aplication for colour touchscreen working in embedded system** *Bachelor thesis*

- Design and implementation of GUI library for LPC1768 microcotroller with a demo application.

2014 **PS/2 driver in Verilog** *University project*
- Design, implementation, synthesis and simulation of simple PS/2 driver in Verilog.

2013 **Binary signed multiplication design** *University project*
- Design, implementation, synthesis and simulation of binary multiplication using I variant of Booth algorithm.

2013 **Digital to analog converter** *University project*
- Parallel loaded, resistor ladder based, 8-bit DAC with nonlinearities less than 0.5 LSB, including temperature sweep and Monte Carlo simulations.

2013 **16x4 bit SRAM** *Hobbystic project*
- 16x4 or 16x8 bit SRAM with address counter design. A part of future LED matrix project (driver for this matrix).

2013 **Operation amplifier** *University project*
- Miller's configuration operation amplifier design with over 20 000 open-loop gain and about 1 MHz bandwidth.

2013 **Simple evaluation board for ATmega8** *Hobbystic project*
- Construction and soldering of simple, modular evaluation board with voltage stabilisation (Zener diode), 7-segment LED display, buttons etc.

Laguages

English **Fluent (FCE)**

Russian **Basic – currently learning**

Other skills

Programming languages **C/C++, Python, Verilog, SQL, PHP (also Joomla framework), MATLAB (basic), Simulink(more than basic)**

Design software **EAGLE 6 (schematic and layout), DxDesigner and Expedition PCB (more than basic), Cadence (Schematic, ADE, Layout, digital simulation), LtSPICE**

Other software and technologies **Linux, LaTeX, git, Wordpress, MS Office**

Additional qualifications **SEP 1 kV license, driving license**

Interests

- snooker, e-sports, cycling trips, 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)

Maciej Kopeć
Brogi 40/107
31-431 Kraków

August 10, 2014

Delphi Poland S.A.
Podgórki Tynieckie 2
30-399 Kraków

Dear Sir or Madam,

In response to your job opening, which I have found on pracuj.pl, I would like to place my candidature.

I am a young, eager to learn student in my fifth year at the AGH-UST doing a degree in technical physics. Electronics and embedded systems are my passion, which is the main reason why, I think, I would be a perfect candidate for the posted opening.

During my internship at Woodward Poland, I was responsible for many electronics-related tasks. I prepared setups, performed tests and then analyzed the results. I also designed electrical circuits and a few PCBs. Throughout my work, in many areas, I was an independent engineer and solved problems myself without any guidance. What is more, there were some ideas of mine, which were accepted and used more generally, in bigger projects.

The above is not my only experience with designing electronics on the schematic level. I made numerous hobbystic projects, which I designed from schematic to a PCB. Some of the projects were made on a prototype board, some on a universal PCB and some were produced by a PCB manufacturer. During courses at the university, I also designed and simulated integrated circuits, such as an operation amplifier or a Digital-to-Analog Converter. Both projects achieved maximum grades. What is more, the DAC was designed with 2-bit better resolution (compared to the rest of the students group) and the same acceptable error rates, which made the project even more challenging. Both ICs were layouted and tested afterwards as well.

While I am not afraid of analog electronics, it is not my strongest side and I realize there is still much to learn. I am eager to do that and I really find analog circuit designing pleasant. All in all, my strongest side is the digital electronics. The most fascinating topics for me in this category are data transmission protocols. Their hardware and software implementation is the thing, I enjoy the most. My recent work in this area is my master's thesis, for which I am developing a hardware I^{2}C protocol implementation. It will be a part of a readout electronics chip for CERN, Geneva.

Designing electronics is not my only asset. I have plenty of experience in programming. Earlier I was working in web-development, and recently embedded systems, especially microcontrollers. I used ATmega and ARM cores and developed a few applications. The biggest and the most complicated was my bachelor's thesis. In all microcontroller-based projects I used ANSI C. I find bringing a tiny computer to life very exciting and enjoyable. This is definitely one of my favorite activities and I tend to have a lot of ideas

for microcontroller applications.

To sum up, there are areas in electronics, which I like a lot, some of the design process I like a little less, but there is no better feeling in the world, than looking at a finished, working product, which was developed with hard work. Nothing makes one more proud than seeing this.

Yours faithfully,

Maciej Kopeć