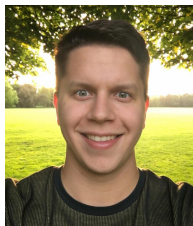


Curriculum vitae

PERSONAL INFORMATION



Maciej Caputa

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- Skype maciej.caputa.pl

WORK EXPERIENCE

01/05/2016–Present

Software Engineer and Mathematician

Innovonomics, Oakville (Remote) (Canada)

Engineering maths e-learning system including quizzing engine using **Angular** and **MathJax** capable of tracking in-depth student's performance, question generator responsible for creating 100000 questions of numerous types from handwritten ones implemented with **TypeScript**. **Creating custom unit test framework**. **Coordinating work** with other teams of designers and curriculum writers.

01/01/2015–Present

Software Engineer and Owner

matematika.pl, Remote

I share my passions by developing system and creating content for e-learning venture matematika.pl. Currently I am updating the platform to become **Progressive Web App** and to release **iOS/Android Apps** using stack of **TypeScript**, **Angular 4**, **ionic 3**, **Angularfire 2**, **Firebase**, **Angular Universal**.

01/10/2016–01/06/2017

Software Engineer and Group Leader

Cardiff University, Cardiff (United Kingdom)

As part of my degree my team was required to build Stock Market Web App in client simulated environment. I was responsible for integrating our system with **Google's Finance API** using **AngularJS** to get live and historic stock quotes, then present them in tile/list-like format and graphs using **d3JS** respectively. Apart from being responsible for crucial parts of the system I also **coordinated implementation tasks** and **lead client meetings and presentations**. Demo version can be seen here <http://bitly.com/StockMarketWebAppDemo>

01/02/2016–01/06/2016

Personal Tutor

Cardiff & Vale Tutors, Cardiff (United Kingdom)

Preparing GCSE students to their final exams based on 1 to 1 tutoring provided at local schools.

10/2012–04/2015

Personal Tutor

Self-employed, Żywiec (Poland)

Conveying complex ideas understandably without using jargon with creative and innovative approach.

05/2014–06/2014

Apprentice

Infonet Projekt S.A., Bielsko-Biała (Poland)

Developing applications using **C++**, **PHP** and **SQL** in waterfall environment.

11/2013–11/2013

Apprentice

F+U International CareerCenter Saxony, Chemnitz (Germany)

Modernisation of IT systems, implementing and managing local network.

EDUCATION AND TRAINING

21/09/2015–Present

BSc (Hons) Computing and Mathematics

EQF level 6

Cardiff University, Cardiff (United Kingdom)

- On track to get a first class degree with distinction.
- Year 2 (75.5%): **Algorithms and Data Structures (90%), Database Systems (77%), Group Project (76%), Human Computer Interaction (71%)**, Calculus of Several Variables (58%), Groups (76%), Matrix Algebra (87%), Series and Transforms (79%), Complex Analysis (65%), Linear Algebra (61%)
- Year 1 (82.5%): **Problem Solving With Python (92%), Developing Quality Software (79%), Introduction To Computational Thinking (81%)**, Foundations Of Mathematics I (96%), Vectors And Matrices (75%), Elementary Differential Equations (76%), Foundations Of Mathematics II (65%), Object Oriented Java Programming (96%)

01/09/2011–24/04/2015

IT Technician

EQF level 4

Vocational Secondary School of Mechanical and Electrical Engineering, Żywiec (Poland)

- I have achieved distinctions and in numerous national competitions to give the Technological Innovation Olympiad (first place) and Innovation and Rationalization Olympiad as two of many examples for which I have constructed and programmed a system responsible for optimising energy generated by solar panels by adjusting degree that solar panels make with sun rays.
- My awarded article on "Ecological Didactic set for the Steering of Solar Panels" has been included in a book published by the University of Bielsko-Biala.
- Occupational skills: use operating systems present in different networks, use software applications and **software** tools, operate network **hardware**, configure hardware and software, design and build **Local Area Network**, set up and administer **databases**, use database languages, including **SQL**, use commonplace programming languages, notably **Pascal** and **C++**, apply different methods of programming and choice of algorithms, determine reasons for computer hardware failure, replace hardware/cards and other hardware modules, use IT documentation.

01/09/2011–24/04/2015

Matura, A-level equivalent

EQF level 4

Vocational Secondary School of Mechanical and Electrical Engineering, Żywiec (Poland)

- **recipient of the Prime Minister's scholarship for exceptionally gifted students in Poland (3 consecutive years)** as well as the County Governor's scholarship for talents in the region (full duration of the education).
- Mandatory Curricular Subjects (standard level): Mathematics 98%, English Language 100%, Polish Language 84%, Polish Language (oral) 100%, English Language(oral) 100%.
- Elective Subjects (extended level): **Information Technology 100%**, Mathematics 78%, English Language 96%

PERSONAL SKILLS

Mother tongue(s)

Polish

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
IELTS 7.0					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
 Common European Framework of Reference for Languages

Communication skills

- excellent **communications and leadership skills** developed through experience in tutoring

- highly **critical thinker** with effective **researching skills** proven by academic achievements
- flexible **team player** who prospers in a fast-paced work environment based on past experience in working on group project in academic environment
- **interpersonal and relationship building skills** proven through experience as student representative

Organisational / managerial skills

- good organisational and time management skills gained as remote software engineer
- good team-leading skills gained by working in university work-simulated environment

Job-related skills

- independent problem solving and learning developed through my career as both **mathematician** and **software engineer**.
- experience with **C++** dating back to 2011 and developed through numerous competitions during high school.
- degree has been delivered and taught using **Java**
- experience with using **Python** to do scientific research and data visualisation and then construct scientific report.
- **Pug** or **Emmet** depending on projects paradigm.
- in depth-knowledge about **CSS3** (including its performance) and **SASS**, **BEM methodology**, newest features, and scalability of the CSS codebase.
- expertise in usage of **LaTeX** and **MathJax** developed through developing e-learning websites, systems and editors.
- extensive experience with object-orientated **JavaScript**, **ES2016** and constantly learning and testing new features.
- day to day experience with **TypeScript** gained through implementation, development and maintenance of big coded for e-learning platform responsible for generating 100 000 number of questions alongside with specific metadata.
- experience with **Firebase** used for live chat, real time stock app, live educational content editor.
- good command of **Angular 4** and **AngularJS**.
- experience in working in both **agile** as well as **waterfall** environment.
- ability to **self organise work** and **independently** take decisions gained through fully remote software engineer position.
- specialisation in **engineering e-learning systems** gained through my current job and my side e-learning venture matematika.pl
- ability to build **progressive web apps** working fully offline e.g. matematyka-wzory.pl.
- ability to build **hybrid apps** through **ionic 3** and **react native** e.g. Country Flag Quiz available on Play Store.
- willingness and genuine interest in self-development and learning new technologies.
- automate build, test and deployment tasks with **gulp** or **webpack**.
- ability to test code write concise and extensive test with **Jasmine** and **Karma** as well as implementing custom, build from ground up, frameworks for testing used for e-learning system.
- ability to design schemas and maintain **SQL** databases for e-learning systems.

ADDITIONAL INFORMATION

Interests

e-learning, emerging technologies, progressive web apps, web performance optimisation strategies, evolutionary algorithms, neural networks, data processing, full stack web development