Łukasz Kędziora, PhD*
SOFTWARE ENGINEER

tel/ +48 696 687 496
e–mail/ contact@lukaszkedziora.com
web/ lukaszkedziora.com
github/ github.com/lukaszkedziora

I am a well-organised, goal-focused software engineer and scientist. I have a rather unusual set of skills; on the one hand, I defended my PhD thesis in 2018 regarding the usefulness of neuroscience and biofeedback in analysing visual messages (mostly art). On the other hand, I have a three-year experience as a full-stack developer specialising in C#, React and Angular. During this period I have been working for both private and public organisations. The most complex app developed mainly by me is a modular web application for foreign language tutors to manage students, classes, payments, as well as to provide some blog post articles, and advertise various freelance services. My recent experience involved maintaining an advanced cloud financial application and providing high-quality programming solutions in the SaaS model. Every day I develop applications by implementing tasks with the use of proven and new solutions related to .NET Core, React.Js, Azure, Docker, ConfigIt etc. I'm improving my skills (React, C#) and gaining new ones in Docker, cloud solutions and machine learning. I remain an analyst and scientist focused on eye-tracking methodology and usefulness of ML in creating and interpreting art pieces. I am a team player and if I have to, I can be the leader as well, but I really like being a passionate teacher who can describe something really boring in an interesting way. Privately, I'm fond of 3D printing, running, and horse riding.

Work Experience (related to IT) :

12.2022 - present   **Demant**
position: application developer
- back-end developing using .Net 6
- update and configuration of docker containers/images
- maintenance and updating microservices
- using Azure pipelines
- using ConfgIt application/SDK

02.2021 – 11.2022   **KnowIt Poland/Cybercom Poland**
position: full-stack developer
- front-end developing using ReactJS
- back-end developing using .Net 6
- update and configuration of docker images
- maintenance and update microservices
- using Jenkins and Azure pipelines
- CQRS implementation update
- using Azure DevOps repository

09.2020 – present   **Pani Kowalska (a commercial web application)**
position: developer/product owner
project: *Learn App*
- preparing mockups
- work planning
- preparing architecture according to the principles of Clean Architecture
- preparing SQL Server database model
- Entity Framework Core implementation
- ASP.NET Identity implementation
- front-end developing using Angular 11 (main page, mentor panel, student panel)
- creating pipeline on Azure DevOps
- deploying the app on the server
  link (early alpha version)
  link (github)

10.2019–01.2021   **Codecool Sp. z o. o.**
position: course attendant

****** Full version of the resume available at www.lukaszkedziora.com

The course covered such topics as: Python basics, .NET Core, ASP.NET, code comprehension, clean code, unit tests, SQL, design patterns, GIT, HTML + CSS, JavaScript, data structures, Angular, multithreading, networking, security.

Selected projects developed during the course:

- GuestBook3 – The project is an ASP.NET Core MVC app. Guest application is one of the must-haves for any beginner programmer. If you are an Admin, you can log in and manage the comments.
  Technology: ASP.NET, MVC, Razor Pages, Dapper ORM, SQL Server
- Hydrozagadka2 – doesn't look like an ordinary roguelike because it's based on the SadConsole library in an unusual way. The game has a graphical menu and interface with photos of Warsaw in a decent resolution. During the game you can talk to characters, collect items, fight against bots, and finally – save water in Warsaw. link
  Technology: C#, .NET, SadConsole, MonoGame, SQL Lite, .NET Core
- Battleship – after starting the game, you can choose who you want to play with – AI or a real person. The AI mode is based on a simple implementation of Monte Carlo method developed by J. Neumann and S. Ulam in 1949. link
  Technology: C#, .NET

1.09.2018-30.11.2019   **Emotin Sp. z o. o., Toruń**
position: researcher
- preparing detailed comparisons regarding the construction and usefulness of various eye-tracker types: Tobii Glasses Pro, Pupil Labs Core, Gaze Point GP3, Tobii X2-30
- preparing detailed comparisons regarding the idea and functionality of various software: Haytham, xLabs, GazePoint, MyEye, Ogama, openEyes, PyGaze, OpenGaze, TurkerGaze, GazeParser / Simple Gaze Tracker, ITU Gaze Tracker, The Eye Tribe, Tobii Pro Lab, Pupil Capture/Cloud, Gazepoint Analysis
- preparing detailed comparisons regarding the construction and usefulness of various EEG signal recorder types: Emotiv Epoc, Emotiv Insight, Mind Wave Mobile
- developing methodology for conducting integrated eye-tracking and EEG research
- participating in works on application for remote operating of an eye-tracker connected with an EEG signal recorder
- providing consultations regarding the hardware configuration of the eye-tracker created by Emotin
- organising and conducting three test sessions for the Emotin eye-tracker (involving over 30 participants, 3 different museum institutions)
- creating and publishing a guide on the methodology for conducting eye-tracking research;
  link

02.2018–12.2018   **Kujawsko-Pomorskie Voivodship Marshall Office**, **Toruń**
position: scholar
project: *How to look at pictures: eye-tracking in museum*
- conducting eye-tracking research at the District Museum in Toruń
- interpreting the results and developing an interactive exhibition website
  link

1.09.2015–14.12.2017   **Art & Science research foundation om – organisms and machines in culture**
position: board member, researcher
- recording artists' activity during artistic performances, using biofeedback devices: B-Alert x24 (EEG), Emotiv Epoc (EEG), Tobii Glasses Pro (eye activity), Equivital (heart rate, breathing rate, skin temperature, GSR, HRV)
- interpreting the obtained data regarding its usefulness in the process of artistic performance recording (12 artists with different devices configuration)

WORK EXPERIENCE (SELECTED) :

09.2020 – 02.2022   **District Museum in Toruń**
position: fundraising specialist

- preparing grant applications
- searching for sponsors and patrons
- negotiations with sponsors
- supervision and coordination of project implementation
- creating and implementing fundraising strategies

01.2020 – 01.2021	**Kujawsko-Pomorskie Voivodship Marshall Office**, Toruń
	position: researcher
	project: *TouchArt - an interactive board game*
	   • developing the game algorithm
	   • developing a technique for creating 3d relief models
	   • printing 10 reliefs using a home 3d printer
	   • developing the visual identity of the game
	   • creating a beta version of the game
	    link

01.2020 – 01.2021 **The City Council of Toruń**
position: researcher
project: *#earseeing - an interactive guide for the guests of the District Museum in Toruń*
- recording and editing 15 spots on selected paintings (4K technique)
- preparing 15 audio descriptions of the paintings
- publication of spots and recordings on the project website
  link

01.2019-12.2019 **Ministry of Culture and National Heritage of the Republic of Poland**
position: scholar
project: *The art of looking – about the artist's eyes and emotions*
- conducting workshops for scholars, seniors, pupils and students of all education levels about the usefulness of eye-tracking and biofeedback in creating and analysing works of art;
  link

26.07.2018–20.08.2018 **National Institute of Polish Cultural Heritage Abroad "Polonika", Chicago, USA**
position: scholar
- preparing a photographic inventory of the Polish Mission Museum Collection in Orchard Lake, "Polonika", Chicago, Orchard Lake, USA

24.02.2016–24.05.2016 **The Warburg Institute, London, UK, The De Brzezie Lanckoronski Foundation**
The Sainsbury Centre for Visual Arts, University of East Anglia, UK
position: scholar
project: *The meaning of visual experience in discovering work of art*
- interpreting selected boards of the *Mnemosyne Atlas* with the use of eye-tracking research

EDUCATION:

10.2019–01.2021	**Codecool Sp. z o. o.**, Warsaw, full-stack junior developer
2013–2018	**Nicolaus Copernicus University in Toruń**, Faculty of History, doctoral studies on (neuro)art history, PhD degree in historical sciences; PhD thesis with distinction from the exam commission (*summa cum laude*) Dissertation titled *Visuality of the work of art – about the need to conduct transdisciplinary interpretations and analyses of works of art;* The thesis involved eye-tracking study conducted on 72 participants
2007–2012	**Adam Mickiewicz University in Poznań**, Faculty of History course: art history MA thesis titled *Neuroaesthetics as a new method of picture analysis*
2006–2009	**Adam Mickiewicz University in Poznań**, European College in Gniezno

course: European cultural tourism
BA thesis titled *In search of the soul of the city – the Capital City of Poznań city guide*

SELECTED PUBLICATIONS (BOOKS):

1. *Sztuka i mózg. W kierunku percepcyjnie zorientowanej historii sztuki*, Wydawnictwo Naukowe UMK, Toruń 2021, 350 pp. link

2. *Art & eye-tracking. A practical guide for artists, art enthusiasts and researchers*, Toruń 2020. link

3. *Sztuka i okulografia. Praktyczny przewodnik dla artystów, entuzjastów i badaczy sztuki*, Toruń 2020, 80 pp.

4. *Wizualność dzieła sztuki. Ocena potencjału neuroestetyki w badaniach historyczno–artystycznych*, Wydawnictwo Naukowe UMK, Toruń 2016, 196 pp. link

Languages:
– English (advanced level)
– Polish (native or bilingual proficiency)

Knowledge and experience in:
– .NET Core, C#, ASP.NET
– ConfigIt
– Angular 11, Razor Pages
– MS SQL Server, PostgreSQL
– Basic Python
– GIT, Azure DevOps
– Linux OS (Ubuntu, Gentoo, etc.)
– Scrum/Agile
– WEB API
– HTML5, CSS3

Skills:
Level 5 - Expert
Eye-tracking

Level 4 - Advanced
Biofeedback, C#, Clean Architecture, Experimental methodologies, React.Js

Level 3 - High Competence
.NET Core, 3D Design Fusion 360, 3D print, AngularJS, Angular-ui, ASP.NET Identity, ASP.NET MVC, ASP.NET Web API, Bootstrap 5, CSS, CSS Flexbox, Dapper, Entity Framework, GIMP, HTML, Jenkins CI, Linux, MS SQL Server, Neurofeedback, Photoshop, React.js, REST, SQL Management Studio, Swagger, Test of Usability and user friendliness, UI/ UX Design, Unit tests, UNIX Shell Script (Bash), Usability Methodology, Wordpress, Workshops

Level 2 - Intermediate
Angular, Angular Material, Automapper, DevOps Management, Dockers, EEG, Git, JavaScript, Microsoft Azure Cloud Services, Monogame, MySQL, Oracle VirtualBox, Python, Razor Pages

Level 1 - Novice
ML.NET, MongoDB development and administration, Azure Storage

Licences:
– driving licence (cat. B)
– motorboat helmsman certificate of competency

I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the European Parliament's and Council of the European Union Regulation on the Protection of Natural Persons as of 27 April 2016, with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (Data Protection Directive)