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Languages

English ●●●●●●●● C2
German ●●●●●○○○ B2
Polish ●●●●●●●● Native

Interests

new technologies,
data security,
bioinformatics,
electronics,
cryptography,
filmmaking,
sports

Szymon Grabia

PROFESSIONAL EXPERIENCE

- 11.2017 - present **Programmer - Analyst**
Medical University of Lodz
Department of Biostatistics and Translational Medicine
- Designed and developed tools for efficient processing and analysis of bio-medical data
 - Designed, developed and maintained an Electronic Health Record web-based platform for cancer prophylaxis program
 - Configured servers and virtual environments used for biomedical computations and bioinformatics tools
 - Optimized and ensured security for created programs
 - Documented and used version control for created code
 - Organized, technically maintained and conducting online training for the scientific and medical community
- 09.2019 - 11.2021 **Symfony developer**
MobileMS Sp. z o.o.
- Participated in designing and creating a database system for managing museum collections of cultural institutions
 - Maintained the above-mentioned system and adapted it to the individual needs of customers
 - Created and maintained map service for route planning and POI management
- 02.2017 - 09.2017 **Junior PHP Developer**
GroMar® Sp. z o.o.
- Implemented and maintained functionalities during the development of a fully customizable e-learning platform
 - Manually tested the correctness of operation of existing modules and services

EDUCATION

- 2021 - present **Medical sciences** Doctoral studies
Medical University of Lodz (International Doctoral School)
- 2018 - 2019 **Computer Science and Information Technology** Master of Science (MSc)
Lodz University of Technology (IFE)
- 2014 - 2018 **Telecommunications and Computer Science** Bachelor of Science (BSc)
Lodz University of Technology (IFE)
- 2017 - 2017 **Elektrotechnik, Informationstechnik und Technische Informatik**
RWTH Aachen University - Erasmus+ Student Exchange

SKILLS

Symfony	●●●●●○○○	Python	●●●●●○○○
PHP	●●●●●○○○	C, C++	●●○○○○○○
Docker	●●●●●○○○	OOP	●●●●●○○○
Linux	●●●●●○○○	MS Office	●●●●●○○○
Git	●●●●●○○○	PHPStorm	●●●●●○○○
SQL	●●●●●○○○	CUDA	●●●○○○○○
JavaScript	●●●●●○○○	GIMP	●●●●○○○○
Agile	●●●●●○○○		

PUBLICATIONS

Pawlik, B.; **Grabia, S.**; Smyczyńska, U.; Fendler, W.; Dróżdż, I.; Liszewska, E.; Jaworski, J.; Kotulska, K.; Jóźwiak, S.; Młynarski, W.; Trelińska, J. MicroRNA Expression Profile in TSC Cell Lines and the Impact of MTOR Inhibitor. *International Journal of Molecular Sciences* **2022**, 23 (22), 14493. <https://doi.org/10.3390/ijms232214493>. IF=6.208

Chrzanowski, J.; **Grabia, S.**; Michalak, A.; Wielgus, A.; Wykrota, J.; Mianowska, B.; Szadkowska, A.; Fendler, W. GlyCulator 3.0: A Fast, Easy-To-Use Analytical Tool for CGM Data Analysis, Aggregation, Center Benchmarking, and Data Sharing. *Diabetes Care* **2022**. <https://doi.org/10.2337/dc22-0534>. IF=17.152

Pawlik, B.; Smyczyńska, U.; **Grabia, S.**; Fendler, W.; Dróżdż, I.; Bąbol-Pokora, K.; Kotulska, K.; Jóźwiak, S.; Borkowska, J.; Młynarski, W.; Trelińska, J. MTOR Inhibitor Treatment in Patients with Tuberous Sclerosis Complex Is Associated with Specific Changes in MicroRNA Serum Profile. *Journal of Clinical Medicine* **2022**, 11 (12), 3395. <https://doi.org/10.3390/jcm11123395>. IF=4.242

Smyczynska, U.; **Grabia, S.**; Nowicka, Z.; Papis-Ubych, A.; Bibik, R.; Latusek, T.; Rutkowski, T.; Fijuth, J.; Fendler, W.; Tomasik, B. Prediction of Radiation-Induced Hypothyroidism Using Radiomic Data Analysis Does Not Show Superiority over Standard Normal Tissue Complication Models. *Cancers* **2021**, 13 (21), 5584. <https://doi.org/10.3390/cancers13215584>. IF=6.575

Grabia, S.; Smyczynska, U.; Pagacz, K.; Fendler, W. NormiRazor: Tool Applying GPU-Accelerated Computing for Determination of Internal References in MicroRNA Transcription Studies. *BMC Bioinformatics* **2020**, 21 (1). <https://doi.org/10.1186/s12859-020-03743-8>. IF=3.169

Pagacz, K.; Kucharski, P.; Smyczynska, U.; **Grabia, S.**; Chowdhury, D.; Fendler, W. A Systemic Approach to Screening High-Throughput RT-QPCR Data for a Suitable Set of Reference Circulating MiRNAs. *BMC Genomics* **2020**, 21 (1). <https://doi.org/10.1186/s12864-020-6530-3>. IF=3.969

PROJECTS

11.2021 - present **LAMAIinDiab - lisdexamphetamine vs methylphenidate for pediatric patients with ADHD and type 1 diabetes - a randomized crossover clinical trial**

Position: Lead Programmer
Financed by the Medical Research Agency
(2021/ABM/02/00006/P/03)

06.2021 - present **HEROES - Heart Failure Observational Study**

Position: Lead Programmer
Financed by the Polish Cardiac Society

04.2018 - 09.2021 **Predictive Biomarkers of Radiation Toxicity (PBRTox)**

Position: Programmer - Analyst
Financed under the FIRST TEAM programme of Foundation for Polish Science
(First TEAM/2016-2/11)

CONFERENCES

06.2022 **Radiomic analysis as a tool supporting diagnostics and monitoring of oncological patients** Oral presentation
Interdisciplinary Conference of Doctoral Students of Medical Universities "DocUMED"

10.2021 **Radiomic analysis as a tool supporting the diagnosis and monitoring of cancer patients** Invited oral presentation
Kongres „Zdrowie Polaków”

10.2021 **How to organize a week-long international virtual biohackathon in the pandemic and not go insane** Oral presentation
Interdisciplinary Conference of Doctoral Students of Medical Universities "DocUMED"

11.2020 **[III-1] Radiomics in prediction of radiation-induced hypothyroidism in patients with oropharyngeal cancer treated with intensity-modulated radiation therapy** Poster presentation
24th Gliwice Scientific Meetings

05.2020 **Radiomics-based machine learning for radiotherapy planning** Oral presentation
16th International and 58th Polish Juvenes Pro Medicina Conference

09.2019	GPU-accelerated identification of reference genes Polish Scientific Networks: Science & Technology	Oral presentation
11.2018	[III-5] Normalization by Combination of MicroRNA Expression for Human Serum and Plasma RT-qPCR Quantification Data 22th Gliwice Scientific Meetings	Poster presentation

AWARDS

2020	Award supporting the scientific excellence of doctoral students Initiative of Excellence - Research University
12.2019	Member of the winning team at Imagine Hack 2019
2019	Rector's scholarship for the best students of Lodz University of Technology
12.2018	NVIDIA Corporation Grant for Higher Education and Research

COURSES

2019	NGSchool2019: Machine Learning for Biomedicine	Summer school
2017	CCNA Routing and Switching: Introduction to Networks	Course

ORGANIZATIONAL ACTIVITIES

09.2023	NGSchool2023: Advances in Computational Biology (IT staff) https://ngschool.eu/ngschool2023/	Summer school
09.2022	NGSchool2022: Machine Learning in Computational Biology (IT staff) https://ngschool.eu/ngschool2022/	Summer school
09.2022	NGSymposium In Computational Biology (IT staff) https://ngschool.eu/ngsymposium2022/	Scientific conference
03.2022	Podstawy statystyki w Pythonie - analiza i wizualizacja danych o dużej wymiarowości (lecturer) Elementy metodologii badań empirycznych w medycynie i zastosowania statystyki w badaniach biomedycznych	Postgraduate studies
09.2021	NGSprint21 (mentor + IT staff) https://ngschool.eu/ngseminars2021/	Online bioinformatics hackathon
2021	NGSeminars2021 (IT staff) https://ngschool.eu/ngseminars2021/	Series of online workshops
09.2020	Virtual NGSymposium (IT staff) https://ngschool.eu/virtual_ngsymposium2020/	Virtual scientific conference
2020	NGSeminars2020 (IT staff) https://ngschool.eu/ngseminars2020/	Series of online workshops
06.2018	Polish Scientific Networks: Science & Medicine (volunteering) http://psn.pan.pl/psn-2018/	Scientific conference