

José Wesley De Souza Magalhães

Brazilian, single, 28 years old
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I have Interest in the area of Information Technology, especially in Compilers, Programming Languages, Static Analyses and Program Synthesis. I am highly motivated, proactive and my goal is to evolve as a professional, enhancing the spirit of teamwork and the experience in the research environment, as well as promoting compiler development and research.

EDUCATION

The University of Edinburgh, Edinburgh, United Kingdom <i>Ph.D. in Computer Science</i>	Feb 2022 - present
Federal University of Minas Gerais, Belo Horizonte, Brazil <i>Master's Degree in Computer Science</i>	Aug 2019 - Oct 2021
Federal University of Viçosa, Florestal, Brazil <i>Bachelor's Degree in Computer Science</i>	Jan 2014 - Feb 2019

EXPERIENCE

Cyral Inc - <i>Software Engineer</i>	Oct 2021 - Jan 2022
Implementation of new features and/or fixing bugs in the services of the data security product of the company using technologies such as Docker, Git, AWS, and so forth. The main programming language used was Go.	
ACM, Association for Computing Machinery - <i>Member of the Artifact Evaluation Committee in the International Symposium on Code Generation and Optimization (CGO)</i>	Nov 2020 - Dec 2020
Evaluating two artifacts of papers accepted in the International Symposium on Code Generation and Optimization (CGO) 2021 and reproducing the results from the paper, and evaluating both functionality and reusability of each artifact.	
Federal University of Viçosa Institute of Exact Sciences - <i>Volunteer Student Representative</i>	Nov 2017 - Dec 2018
Supervision of the evaluation process of the work of the institute and dissemination of the institute's academic works within the university.	
Court of Justice of the State of Minas Gerais - <i>Processes Server/Bailiff</i>	Mar 2014 - Sep 2014

Delivering legal documents to a defendant or person involved in a court case, execution of arrest warrants, seizure, and valuation of the property and maintaining order at trial sessions and judicial hearings.

SKILLS

- JAVA, C, C++, Python, Julia, R, SML, Go, Shell Scripting
- Static and Dynamic Program Analysis
- LLVM/Clang Frameworks
- Program Synthesis/Lifting
- Git, Docker

LANGUAGES

- English
- Portuguese

SCHOLARSHIPS AND AWARDS

Best Research Paper at GPCE'23, with the work "C2TACO: Lifting Tensor Code to TACO"

Informatics: ICSA: Comp. Architecture, Compilation & System Software, Networks & Communication (PhD) (Full-time) - School of Informatics Funding Package 2022-2025

2nd Best Research Paper at SBLP'19, with the work "Synthesis of Benchmarks for the C Programming Language by Mining Software Repositories"

CAPES Msc. Scholarship 2019-2021

PUBLISHED WORKS

Magalhães, J. W. D. S., Woodruff, J., Polgreen, E., & O'Boyle, M. F. (2023, October). **C2TACO: Lifting Tensor Code to TACO**. In *Proceedings of the 22nd ACM SIGPLAN International Conference on Generative Programming: Concepts and Experiences* (pp. 42-56).

Magalhães, J. W. D. S., Liao, C., & Pereira, F. M. Q. (2022). **Automatic inspection of program state in an uncooperative environment**. *Software: Practice and Experience*, 52(12), 2727-2758.

Armengol-Estapé, J., Woodruff, J., Brauckmann, A., Magalhães, J. W. D. S., & O'Boyle, M. F. (2022, June). **ExeBench: an ML-scale dataset of executable C functions**. In *Proceedings of the 6th ACM SIGPLAN International Symposium on Machine Programming* (pp. 50-59).

Da Silva, A. F., Kind, B. C., de Souza Magalhães, J. W., Rocha, J. N., Guimaraes, B. C. F., & Pereira, F. M. Q. (2021, February). **Anghabench: A suite with one million compilable c benchmarks for code-size reduction**. In *2021 IEEE/ACM International Symposium on Code Generation and Optimization (CGO)* (pp. 378-390). IEEE.

Guimarães, B. C., Magalhães, J. W. D. S., da Silva, A. F., & Pereira, F. M. (2019, September). **Synthesis of Benchmarks for the C Programming Language by Mining Software Repositories**. In *Proceedings of the XXIII Brazilian Symposium on Programming Languages* (pp. 62-69).

OTHER INFORMATION

My personal webpage: <https://josewesley.com/>

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GitHub: <https://github.com/JWesleySM>