

Alexandre CIRILO

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 Amsterdam, Netherlands
 Born July 28th 1993



I have a background in Computer Science and Biochemistry. I love all things coding – on my free time, I develop open-source software of my own. I consider myself a critical person, always questioning the way of doing things, as well as being receptive to constructive criticism, and always eager to learn new concepts

SKILLS

Programming languages	Python, R, JavaScript, Nextflow
Databases	PostgreSQL
Development tools	Visual Studio Code, PyCharm, RStudio
Operating systems	Linux (Fedora), Windows, macOS
Others	Bitbucket, Git, GitHub Actions, Jira

EXPERIENCE

Today September 2023	Software Engineer, KPN, Amsterdam <ul style="list-style-type: none">> Hired through the Tech Talent Program> Event-streaming <div>Python JavaScript Visual Studio Code</div>
August 2023 October 2021	Bioinformatician, BASECLEAR, Leiden <ul style="list-style-type: none">> Standard and custom data analysis> Development of tools and pipelines> Data visualization and EDA (NumPy, Pandas, Matplotlib, Seaborn, ggplot2)> Unit testing (pytest)> Version control (git, Bitbucket)> Running pipelines on HPC (High Performance Cluster) <div>Python R Nextflow Visual Studio Code RStudio JIRA Bitbucket</div>

LANGUAGES

English	● ● ● ● ●
French	● ● ● ● ●
Portuguese	● ● ● ● ●
Spanish	● ● ● ○ ○
Dutch	● ○ ○ ○ ○

STRENGTHS

- > Can-do attitude
- > Committed
- > Curiosity-driven
- > Enthusiastic
- > Flexible



EDUCATION

2018 - 2021	M.Sc. in Computer Science	Faculty of Sciences, University of Leiden (the Netherlands)
2016 - 2018	M.Sc. in Biochemistry	Faculty of Sciences, University of Lisbon (Portugal)
2011 - 2016	B.Sc. in Biochemistry	Faculty of Sciences, University of Lisbon (Portugal)

PROJECTS

RAMACHANDRAW

2019 - 2020

 github.com/alxdririlo/RamachanDraw  <https://pypi.org/project/RamachanDraw/> RamachanDraw PyPI
RamachanDraw is a tool used to draw a Ramachandran plot based on the input PDB file. It makes use of a Gaussian KDE (kernel density estimation) to plot the density of favoured torsion angles (ϕ and ψ). This Python package has already been downloaded more than [13k](#) times and cited in literature [Choudhuri 2022; Liang et al. 2022; Schuurs et al. 2023; Xiong et al. 2022].

Python PyPI PyCharm

HEX

2020

 github.com/alxdririlo/hex

Built a Hex board game with Monte with an AI player using the Monte Carlo tree search (MCTS), a heuristic search algorithm.

Python Visual Studio Code Reinforcement learning MCTS

UNIGET

2022

 github.com/alxdririlo/UniGet

UniGet is a tool written used to search, filter, and fetch records from the UniProt database.

Python Visual Studio Code PyQt5

CHECKERS

2023

 github.com/alxdririlo/checkers

Currently working on building a checkers game with MCTS implementation and planning to use deep Q-learning to train a competitive model for an AI player based on the MCTS dataset.

Python Visual Studio Code Reinforcement learning Alpha-beta pruning

CERTIFICATIONS

JavaScript Algorithms and Data Structures	Issued: January 2023	Verification code: freeCodeCamp
Back End Development and APIs	Issued: February 2023	Verification code: freeCodeCamp
Relational Database	Issued: June 2023	Verification code: freeCodeCamp