PABLO FOCKE

QA & DEVELOPER PYTHON, JAVA, C++, RUST

CONTACT

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City
Grenoble, France

ACOMPLISHMENTS

- Publication of a scientific paper in EJOR (European Journal of Operational Research) (click here)

- Android Game (click here)

- 3rd place in informatics team competition organised by the UGA (2019)

- Development of personal website (click here)

LANGUAGES

- English
- French
- Spanish

WORK EXPERIENCE

Sogilis - Grenoble Developer & QA	**04/ 23 - 06/24**
Open Groupe - Grenoble Developer	**12/ 22 - 03/23**
G-SCOP - Grenoble Internship (x2) "Tree Search Optimisation"	**02/22 - 09/22** **06/20 - 08/20**
LIG - Grenoble Internship "Eye-Tracking assisted engine"	**02/21 - 08/21**

EDUCATION

2021 - 2022 Master 2 - ORCO (Grenoble, France)
Operations Research, Combinatorics and Optimization ; Informatics and mathematics

2020 - 2021 Master 1 - MOSIG (Grenoble, France)
Master of science in informatics at Grenoble

2017 - 2020 L1 – L3 MIN (Grenoble, France)
Mathematics and informatics at Grenoble

2003 - 2017 Lycée Français Louis Pasteur (Bogota, Colombie)
French scientific bachelor's degree

SKILLS

INFORMATICS:

- Optimisation of code
- Python, C, C++, C#, Rust, Java, HTML, CSS, TypeScript, ARM
- Docker, Gitlab CI, Jenkins, SVN, Maven, Spring, ASP.NET
- TDD, Parallel/Linear programming, Agile development
- AI & Neural Network basics

MATHEMATICS:

- Formal logic, arithmetics, linear algebra, applied mathematics, fourier series
- Graph theory

OTHER:

- Image editing: Photoshop, GIMP
- Video-games: Unity3D, Game Maker
- Video editing : Pinnacle studio 17, Cyberlink Power Director 9
- Audio editing : Audacity, FL Studio & Studio One

💼 WORK EXPERIENCE

Sogilis - Grenoble   04/ 23 - 06/24

Position : Developer & QA

Achievements:

- Developed a standardized software using Visual Studio and ASP.NET for visualizing medical samples
- Backend development
- Implemented unit tests (including GUI tests) with TDD
- Worked as QA/Dev to enhance the test suite for an image analysis and contour extraction software
- Set up CI with Jenkins and execution in a Docker container
- Optimized tests
- Developed features within a team of 40+ developers
- Improved overall QA test infrastructure

Tools and Software:

Java / Python / C# / Docker / Gitlab CI / Jenkins / Visual Studio / ASP.NET / TDD

Open Groupe - Grenoble   12/ 22 - 03/23

Position : Backend Developer

Achievements:

- Backend development for a shooting game (with physical targets and buttons)
- Developed a simple graphical interface (Frontend)
- Implemented communication between Frontend and Backend (API-REST)
- Applied agile methodology
- Quickly acquired knowledge for new projects
- Code maintenance

Tools and Software:

Java / SpringBoot / API-REST / TypeScript / CSS / Angular / HTML / Python

💙 MY VALUES

Emotional well-being is very important to me, and everywhere I work I always try to have a good attitude towards others and spread positive energies 😄. I believe that when there is a good ambience in the room, everyone works better and, most importantly, **feels** better.

💼 INTERNSHIPS

G-SCOP - Grenoble

02/22 - 09/22
06/20 - 08/20

Position : Internship « Tree Search Optimisation »

Project Description:

Study of the "permutation flow shop scheduling problem," aimed at scheduling "tasks" across a set of "machines" with constraints (attempting to complete all tasks in the shortest time possible). To find fast and effective solutions to this NP-Complete problem, algorithms like "Iterative Beam Search" and heuristics are used.

Achievements:

- Formulated the problem in a tree-like structure
- Analyzed cases and created suitable heuristics
- Published a scientific paper in English
- Improved the best-known results on one of the most commonly used benchmarks
- Optimized the code for better performance, and migrated the code from C++ to Rust (a highly performant language)

Tools and Software:

Python / C++ / Rust / Git / Visual Studio Code

LIG - Grenoble

02/21 - 08/21

Position : Stage « Eye-Tracking assisted engine »

Project Description:

Using an Eye Tracker tool (Tobii Pro) to enhance a search engine similar to Google/Bing. The Eye Tracker indicates the position of the user's gaze on the screen. With this information and the anticipated knowledge of the words displayed on the screen, we can infer the words being read and improve the search. For example, if the user searches for "earth" and looks at words like "Jupiter," "Sun," "Orbit," we can infer that they are searching for the "planet Earth" rather than the material.

Achievements:

- Created a GUI for configuring the Eye Tracker using Qt Designer
- Developed a connector between the Eye Tracker and the Backend (Python and Java)
- Performed statistical analysis of the Eye Tracker data
- Enhanced a web query using the information read on the screen

Tools and Software:

Python / Java / Tobii Pro Eye Tracker / QT / Git / Visual Studio Code