Anthony Bara

Software Engineer

Profile

From Grafcet on old programmable logic controller, to the famous french educational platform OpenClassRoom, to finally land at 42 school.
The path to becoming a developer was exciting and each new road I take now is even more so. Passionate about programming and curious to learn. My recent professional years have taught me that my main strength is my tenacity.

Contact

 Valenciennes (59)

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 github.com/banthony42

 anthonybara

Languages

French (native)
English

Interests

♫ Guitar

🎮 Gaming

✎ 3D modelling, pixel art

🌲 Fishing

💼 Experience

- **Software engineer**
  P1 SECURITY, Paris. since January 2020
- Within Network Intrusion Detection System development team, for Telecom signaling traffic. I had the opportunity to develop, maintain and test all the staks of the software, or to resolve technical debt. Here is an non-exhaustive overview of the tasks i have made:
- *Backend*: C, Lua, Python, Django, Bash
    - Rework and improvement of the asynchronous API REST client, keeping it highly configurable.
    - Improvement of the packet history system
    - Rewrite and improvement of the Elasticsearch instance manager (Mappings, Templates, Lifecycles)
    - Added support for OpenIDConnect
- *Frontend*: CSS, JS, Kibana
    - Creation of Kibana visualizations and dashboards.
    - Kibana pages integrations into the software's web interface.
- *Database*: Redis, Elasticsearch
    - Production ready tool, to handle automatic database migration after Elasticsearch upgrade. (5.6 -> 7.10)
    - Resolutions of data format changes, without losses (10 to 40 million documents).
- *Continuous integration*: Jenkins, Python, bash
    - Devops on a Jenkins CI composed of a master node and five agents.
    - Maintenance and development: test pipeline, unit tests, functional / end-to-end tests.

- **SDK software developer for a robot.**
  BLUE FROG ROBOTICS, Paris. May 2019 – October 2019
- New feature development for the robot, keeping in mind to supply good public interface for the SDK users (C#/Unity).
- Maintenance of the existing code base.
- Code review and agile method.

- **Robot application developer.**
  BLUE FROG ROBOTICS, Paris. September 2018 – March 2019
- Applications development using internal SDK (C#/Unity).
- Development of an app to easily run non-regression automated tests.
- Rework and maintenance of existing apps.
- Code review and agile method.

- **Embedded development and mechanic, electronic conception**
  MAINBOT Paris. November 2016 – April 2017
- Winky robot first prototype development
- Mechanical conception for 3D printing, using Solidworks.
- Printed circuit board conception using Kicad.
- Development on Arduino and Raspberry Pi. (C/C++)

- **Industrial designer**
  BOUBIELA MORET Saint-Quentin. May 2013 – November 2015
- Design of loading equipments according to specifications.
- Creation of 3D models and fabrication plans on Solidworks.
- Monitoring part manufacturing and machine assembly.

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Projects

Tribute to Dofus

- Enjoy learning Rust trying to develop a connected RPG.
- Status: In progress
- Initiative: personal

XV

- Animated industrial tasks viewer/editor.
- Status: Finished
- Initiative: 42 school

🎓 Education

- **Rust Learning**
  Autodidact. Since February 2024
  - Start learning by reading documentation (Rust Book).
  - Then practice with exercices, data import with JSON and basic client-server chat implementation.
  - Creation of Tribute to Dofus, the early days of a connected RPG project:
    - The only ambition is to learn Rust and enjoy trying to develop a connected RPG.
    - Graphic client using 'piston' crate.
    - Client-server communicate using GRPC with 'tonic'.
    - Server-database communicate using an ORM, with 'diesel'.
    - Asynchronous tasks for requests, using 'tokyo'.
    - CLI tool to manage players accounts, using 'clap'.
    - Tilemaps are imported as JSON to practice with 'serde'.
    - Game maps drawn in pixel art using Aseprite.

- **Numeric architect diploma**
  42 school Paris. November 2015 – January 2020
  - Learning through projects implementation.
  - Peer code review, and reading documentations.
  - Intensive C practice rewriting well-known programm such as malloc, client-server ftp, basics of Wolfenstein 3D.
  - Then object-oriented programming :
    - Nibbler, a snake game with dynamic graphic library switch at runtime (C++).
    - XV, an animated industrial tasks editor and viewer. Element animations, timeline implementation to handle the whole models animations, file manager to save the tasks simulation or to load an existing one, 3D object import at runtime (C# - Unity).

- **Bachelor of Science in informatic conception engineering**
  UPJV Saint-Quentin. September 2012 – May 2013
  - Mastery of CAD tools.
  - Mechanical engineering studies and industrial project management.

- **BTEC Industrial Mecanic and Automation**
  High school Condorcet Saint-Quentin. September 2010 – June 2012
  - Conception and maintenance of industrial machines and automated systems.

★ Skills

Level	Skill	Level	Skill
●●●●○	C	●●●●○	Linux
●●●●○	Lua	●●●●○	Elasticsearch
●●●●○	Bash	●●●●○	Kibana
●●●○○	Python & Django	●●●●○	Redis
●●●○○	VirtualBox / Vagrant	●●○○○	VMWare/ESXi
●●○○○	HTML/CSS	●●○○○	Javascript
●●○○○	C#	●○○○○	C++
●●○○○	Rust - **Active learning**	●○○○○	Docker