

## Summary

Passionate Software Engineer with a successful first experience in web & mobile full stack design & development. Always eager to learn and improve, I love to communicate and I am looking for new challenges!

## Technical Profile

- **Programming Language (Frameworks, Libs):** Python (*Flask, Django, FastAPI, SQLAlchemy, PyMongo, pytest, Numpy, Uvicorn, Pydantic, Requests*), JavaScript (*Node.js, Express.js, Vue.js*), Android, Java Kotlin (*Room, Firebase, Gson, Jetpack Compose, Retrofit, MVVM, Coroutine*), Flutter, PHP (*Laravel*)
- **Data Store:** PostgreSQL, MongoDB, MySQL, SQLite, Firebase (*Storage, Firestore/Realtime Database*)
- **Data:** Shiny, Pandas, Matplotlib, Jupyter
- **Platform, DevOps, CI/CD:** Git, GitLab, Docker, Jenkins, Selenium, Cron
- **Authentication:** JWT Auth, Firebase
- **Other:** REST, API, OpenAPI, HTML, CSS, SCSS/SASS, Bash, Jira, Nginx, Apache, Regex

## Competencies

**Technical knowledge:** knowledge of software engineering principles, design patterns, programming languages, and development tools

**Problem-solving ability, Creativity, Adaptability:** identify and analyze complex problems, develop creative solutions, and implement them effectively

**Teamwork and collaboration, Organization:** work effectively with cross-functional teams, organize work effectively, engage and encourage a collaborative work environment, and build strong relationships with team members

**Initiative:** actively look for and suggest improvements whenever I see an improvement opportunity, actively looks for documentation or support when facing a difficulty

**Communication skills:** able to articulate technical concepts to non-technical stakeholders, share knowledge, write technical documentation, and provide regular progress updates to project stakeholders

**Continuous learning:** keeping up-to-date with new technologies and industry trends, and integrating new knowledge into work

## Experience

### Training and job hunting

**Web & Mobile Software Engineer** - – Paris, FR 04/2024 – Present

Training and personal projects in: Kotlin, Python, Javascript

#### Context - Mission

- Acquire new skills and practice on real and personal projects

#### Tasks - Achievement

- Android 14 and Kotlin development masterclass formation.
- Kotlin apps realization: quiz app, drawing app, note-taking app, weather app, chat app (whatsapp-like with notifications), Uber clone app
- Python apps realization: flexible multilingual LaTeX resume generator based on the JSON Resume standard
- JavaScript apps realization: CRM web app to assist me in my job hunting and applications management + job boards scraping to have all job postings and manage them and my applications in one place.
- Build a home server to backup my data with redundancy (raid) + deploy and expose apps and services

#### Technical environment

- *Mobile*: Android, Kotlin
- *Web*: Python, Javascript, Vue.js, Node.js, HTML, CSS
- *Devops, CI/CD*: Git, Github
- *Databases*: PostgreSQL, MongoDB
- *Languages*: French, English
- *Others*: Linux, Rest API, Trello

## Synapsun

**Web & Mobile Software Engineer** – Lyon, FR 10/2022 - 03/2024

Full stack web & Android mobile design and developments: Flutter, Python

### Context - Mission:

- Automate and improve company's repowering\* service reactivity (\*: Identify and offer replacement solar panels to solar plant owners whose panels are either ageing or damaged)

### Tasks - Achievements

- Collection of needs, built specification dossier with technical and functional specifications, software application components definition & design to best answer the company's needs.
- Web Scraper Development in Python
- Data Models Design
- Wrote APIs specifications in the OpenAPI / Swagger standard
- MongoDB product database and Python FastAPI API setup
- Mobile Multi-platform client app development in Flutter.
- Secure Access management with JWT tokens (Json Web Token)
- PostgreSQL database and Python Django back-end setup for Users and Quotations management.
- Supplier / Subcontractor contact for outsourced tasks

### Goal

- Relieve commercial service in the process dealing with repowering quotation requests and reduce reply time to potential clients.
- Identify and immediately access client's plant's panels' specifications
- Automate the search for compatible panels available either in our shop or at suppliers.
- Give our clients a mobile app whose objective is to guide them to send a quotation request on identified compatible products.

### Technical environment

- *Mobile*: Android, Flutter
- *Web*: Python, Django, Javascript, PHP, HTML, CSS
- *Devops, CI/CD*: Git, Github
- *Databases*: PostgreSQL, MongoDB
- *Languages*: French, English (international team)
- *Others*: Linux, Rest API, Trello

## Bollhoff

**R&D Engineer** – Chambéry, FR 04/2022 - 10/2019

Automotive Mechatronic Product design & development

### Context - Mission:

- R&D Innovation Service, development of a new range of products with high value - instrumented assembly systems and fasteners.

### Tasks - Achievements

- Products and Process/Trials related products design (geometry, CAD/CAE, dimensioning, optimization, interfaces): Sensors, Preconstraint screwed assemblies, Body fixed elements (tank, roofbox,...), Automotive suspension/Ground liaison elements (McPherson, Flexible, Blade,...), Custom Machines (glueing, pneumatic prehension/command)
- Technical drawing, Functional dimensioning, Chains of dimensions (Arithmetic, Quadratic)
- Ensure plays with environment (architectural, thermal, ...)
- Ensure mountability, positioning and fixation of parts with assembly means
- Writing trial and validation procedures: Lab, Sub-system, System, Flexion and Tensile trials.
- Taguchi/Design-Of-Experiments: Definition, Analysis
- Extensometry, Acquisition: check mechanical resistance and concordance with CAE simulations with strain gauges (HBM)
- Plasturgy : Water/Dust proof casing design
- 3D Prototyping: FDM 3D printing, Supplier Contact for other prototype parts
- Take part in design review meetings : progress and problems sharing, action plan definition and realization.

### Technical environment

- *CAD: DS Catia V5, PTC Creo 7*
- *PDM: Windchill*
- *CAE: Ansys Workbench, Creo Simulate, Altair Simsolid*
- *DOE, Statistics: Minitab*
- *Extensometry, Acquisition: HBM Strain Gauges, Catman Easy, Kickstart Multimeter Oscilloscope*
- *Languages: French, English (international team)*
- *Others: Excel, Powerpoint, VBA*

## Renault

**Automotive Design Engineer** – Vélizy-Villacoublay, FR 07/2008 - 11/2013

Underbody & Engine Compartment Design & Architecture

### Context - Mission:

- Architecture/Powertrain Service- Vehicle parts design:
  - 11/16>03/17: Renault Zoé Ph.2 (EV) Engine compartment/Underbody Design/archi;
  - 08/17>07/19: PHEV, CMF1/CMF-B Platforms, Underbody Design-archi and Technical Management;
  - 04/19>09/19: Euro7 & HEV, CD1 Utility Vehicle Platform, Underbody Design-archi and Technical management.

### Tasks - Achievements

- Product definition (Geometry, Interfaces): All kind of part in designated architecture area.
- Ensure plays with environment (Archi, Thermal,...) with fixed or moving parts
- Ensure mountability, positioning and fixation of parts with manual or automatic means
- Technical Drawing, Functional dimensioning, Chains of dimensions (Arithmetic, Quadratic)
- Design convergence management
- Team management (Management of French and off-site designers)
- Organize and lead design review meetings, problem presentations, action plan definition and application.

### Technical environment

- *CAD: DS Catia V6*
- *PDM: NewPDM*
- *Languages: French, English (international team)*
- *Others: Excel, Powerpoint, VBA*

## Other information

### Education

- **09/23:** **Certification in Software Design & Development**
- **09/22 - 08/23: Bachelor Degree in Software Design & Development**, EPSEI, *Lyon, FR*
  - Software development: Java, Python, Dart/Flutter, etc.
  - Data, Databases, etc. : PostgreSQL, MySQL, MongoDB,...
  - Tests, Continuous Integration / Delivery (CI/CD): Jenkins, Docker, GitLab, ...
- **06/22 - 08/22: Web Developer Training Program**, Epitech, *Paris, FR*
  - Software development / web: JavaScript, Vue.js, HTML, CSS, PHP, Laravel,
  - Others: Bash, Git
- **09/13 - 08/16: Master degree in Mechanical Systems Engineering**, University of Technology of Troyes (UTT), *Troyes, FR*
- **09/11 - 06/13: 2-Year Degree in Mechanical Engineering**, IUT, *Troyes, FR*
  - Design, Sizing, Enslavement & Programming of a robot to attend French RoboCup

### Languages

English (Professional Working, C1 - Bulats), French (Native), German (Intermediate, B1)

### Hobbies

- Outings: Hiking, Concerts, Motorcycle, Photography
- Music: Drums, Guitar, Piano
- Travels: Sweden, Cambodia, Thailand, Greece, Germany
- Readings: B.Werber, M.Chattam, F.Thilliez