

## JOB OFFER

# SOFTWARE ENGINEER SCIENTIFIC ENGINE (PYTHON)

-  **LOCATION** – Paris, France
-  **EXPERIENCE LEVEL** – 2+ years of experience
-  **START DATE** - Flexible
-  **REMOTE WORKING** – Partial remote is welcome!

## ABOUT DESCARTES UNDERWRITING

**WHO WE ARE** | Founded in 2018 and headquartered in Paris, Descartes Underwriting was born of the conviction that climate change calls for a revolution in the insurance industry to better protect individuals, businesses, and governments. We provide data-driven insurance products based on satellite imagery and IoT to protect corporate and public sector clients against climate risk and natural catastrophes. Following a Series A funding of 18m USD in September 2020, we opened offices in New York, Singapore, Sydney and London. Today, Descartes' ambitious and international team of 45+ is proud to protect 150+ clients – several from the Fortune 500 – in 60+ countries.

**OUR PURPOSE** | Losses from catastrophes and man-made disasters are likely to increase year after year due to demographic density and climate change. We firmly believe that the insurance sector can and must play a critical role in helping enterprises and individuals cope with climate risk. This will require, however, a deep transformation of the sector, as current insurance products often lack transparency, carry expensive premiums, and come with slow claims processing.

**OUR APPROACH** | True to our namesake, René Descartes, one of the greatest European scientific philosophers of the 17th Century, our company draws a distinct advantage in challenging the approach adopted by traditional insurers. Utilizing forward-looking models and real-time monitoring from satellite imagery, IoT and big data analytics, Descartes' products help businesses bounce back faster. In collaboration with our partners, our parametric insurance products can serve clients across the globe, from mid-size tickets to EUR +100 million.

## ABOUT THE ROLE

Due to our consistent growth, we are seeking to expand our Data, Software and DevOps team. At the core of our company, your missions will focus on:

- Testing and refactoring code already used in existing project
- Introducing object oriented patterns in functional code
- Harmonizing data structures to streamline computation pipelines
- Time profiling and optimizing python code
- Implementing and testing scientific models

## **KEY MISSIONS**

- Develop, optimize and update software for:
  - Calculation of risk models
  - Data collection, preparation and visualization

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- Export of outputs adapted to users
- Testing and validation of existing solutions
- Monitoring of contracts and associated data
- Support, test and correct the tools of:
  - Continuous development and continuous integration (CD/CI)
  - Data storage
  - Version management of scrips, codes, languages and computer systems
  - Modularization and containerization of IT solutions
  - Connection to external and internal API's
- To participate in:
  - The assessment and definition of user needs
  - Modeling the risks of underlying contracts
  - The choice of technical solutions
  - Discussions with IT partners
  - Improving the skills of technical staff
  - Managing the access and rights of users of internal tools

### TECH STACK

- Cloud provider: GCP
- Code versioning tool: Git + Gitlab
- OS: Linux
- Code base: Python

### EQUIPMENT

- Laptop: premium DELL XPS 15
- OS: you decide

## ABOUT YOU

### EXPERIENCE & QUALIFICATIONS

[Hard skills]

- Solid knowledge in one of the following languages python, C/C++ or java
- Good knowledge in python
- Solid scientific background
  - bachelor in computer science, mathematics, physics, climate science
  - contact with scientific domain (e.g. robotic, physics engine in video game, data science)
- Experience with Docker
- Experience in TDD
- Good knowledge in English and fluency in French
- Familiar with production development workflow (code reviews, fast forward git policy)

[Soft skills]

- Desire to train junior developers and explain software design and good practices
- Desire to suggest improvements to the architecture

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- Ability to understand break epic track in achievable issues

[Nice-to-have]

- Experience working with public API with python
- Experience optimizing and profiling python code
- Experience in a microservices architecture
- Experience in HPC
- Contribution to an open source project

## MINDSET

- Strong interest with climate issue (it's not a hoax, many people suffer from it)
- Being comfortable to work alongside corporate insurers (some still wear suits )
- You enjoy CI/CD automation (or at least appreciate the elegance of a well-crafted pipeline)
- Willingness to help junior developers (remember how you were when you started )
- Strong team spirit and ability to work (you'll have to review code and have your code reviewed)
- Rigorous, creative and meticulous mind (we handle large insurance, we take our time)
- Strong desire to learn (there's no limitation to the tech used, we're happy to test and learn new tools)
- Eagerness to work in a multi-cultural environment (policies and teams are from all around the world )

## WHAT'S IN IT FOR YOU?

- Join a company with a true purpose – help us help our clients be more resilient towards climate risks
- A competitive salary, bonus and benefits (Premium Alan health insurance, Swile restaurant vouchers, Navigo reimbursement etc.) 
- The opportunity to grow in your role, as the company does
- Commitment from Descartes to it's staff of continued learning and development (think annual seminars, training etc.)
- Be part of a collaborative, diverse team where your ideas are heard 
- A paid referral scheme for successfully referring peers
- Frequent team events

## HOW TO APPLY

If this sounds like the perfect challenge, please don't hesitate to submit your application and resume on:

<https://www.descartesunderwriting.com/careers/>