

Software Intern

Title	Software Intern	Locations	Aix-en-Provence, France
Team	Application	Reports To	VP, Development
Date	2023-10-09	Email	careers@alpha10x.com

About Us

ALPHA10X is a breakthrough FinTech startup positioned to disrupt the \$2.4 trillion-a-year private technology investment market. Applying state-of-the-art artificial intelligence and machine learning, ALPHA10X analyses vast volumes of data that are dynamic, chaotic, noisy, and multi-dimensional, consisting of a collection of connected relationships and parts, to provide the decision intelligence that corporate innovators and technology investors can rely on to generate superior outcomes and alpha. Curating deep knowledge from scientific, innovation and investment datasets, ALPHA10X computes precise analytics and predicts the future with high accuracy. Based on over a decade of R&D, ALPHA10X is the clear frontrunner and market-maker in the race to apply AI to private company investment. Founded in 2018, headquartered in Luxembourg, with R&D centers in France and Morocco, the team of 38 FTEs comprises prominent AI scholars and scientists with PhDs and advanced degrees from elite universities. The board, all investors, includes renowned academics and high-profile business leaders with exceptional track-records. The founder and CEO, Robert Marcus, is a former Sand Hill Road (Silicon Valley) VC, investment banker, public-company CEO, and director on the Microsoft M&A team. The company has signed a partnership with Accenture and deployed several pilots. It has been recognized by Microsoft as one of the leading AI startups in Europe, and by the European Union for market-creating innovations that shape the future. ALPHA10X is purposed to join the emerging class of ‘impact unicorns’, startups that are valued at one billion dollars or more and improve the lives of one billion people or more.

<https://www.alpha10x.com/>

Job Description

We are looking for a Software Intern to contribute to the development of our application: You have the ability to take complex ideas and distill them into simple, working code? You have the ability to display flexibility in a fast-paced and changing working environment? You like to take up technological challenges and share your ideas and convictions? You want to be part of a multicultural startup placing the human at its center? This is the right startup to grow and to take part in meaningful projects.

Key Responsibilities:

Main responsibilities include but not limited to:

- Design, develop, and implement robust, efficient, and scalable software architectures that can handle the interaction between the application and the Knowledge Graph
- Collaborate with the Data team in the ideation phase to anticipate any changes in the stack and ensure that chosen tools are implemented correctly.
- Work closely with the Full-Stack team to develop and implement APIs, ensuring seamless integration and data exchange between the front-end and back-end systems.

Qualifications:

Required:

- Masters degree in Computer Science or related field.
- Proficiency in Python.
- Strong problem-solving and analytical skills, with a keen attention to detail.
- Strong English communication skills, both verbal and written.

Preferred (Nice to have):

- Experience with Neo4J database and Cypher query language.
- Experience in Databricks and PySpark Framework.
- Experience with Typescript programming language.
- Experience with cloud infrastructure and services such as AWS, Azure or GCP.

Data Engineer Intern

Title	Data Engineer Intern	Locations	Aix-en-Provence, France
Team	Data Engineer	Reports To	Chief Technology Officer
Date	2023-10-09	Email	careers@alpha10x.com

About Us

ALPHA10X is a breakthrough FinTech startup positioned to disrupt the \$2.4 trillion-a-year private technology investment market. Applying state-of-the-art artificial intelligence and machine learning, ALPHA10X analyses vast volumes of data that are dynamic, chaotic, noisy, and multi-dimensional, consisting of a collection of connected relationships and parts, to provide the decision intelligence that corporate innovators and technology investors can rely on to generate superior outcomes and alpha. Curating deep knowledge from scientific, innovation and investment datasets, ALPHA10X computes precise analytics and predicts the future with high accuracy. Based on over a decade of R&D, ALPHA10X is the clear frontrunner and market-maker in the race to apply AI to private company investment. Founded in 2018, headquartered in Luxembourg, with R&D centers in France and Morocco, the team of 38 FTEs comprises prominent AI scholars and scientists with PhDs and advanced degrees from elite universities. The board, all investors, includes renowned academics and high-profile business leaders with exceptional track-records. The founder and CEO, Robert Marcus, is a former Sand Hill Road (Silicon Valley) VC, investment banker, public-company CEO, and director on the Microsoft M&A team. The company has signed a partnership with Accenture and deployed several pilots. It has been recognized by Microsoft as one of the leading AI startups in Europe, and by the European Union for market-creating innovations that shape the future. ALPHA10X is purposed to join the emerging class of 'impact unicorns', startups that are valued at one billion dollars or more and improve the lives of one billion people or more.

<https://www.alpha10x.com/>

Job Description

As a Data Engineering Intern at ALPHA10X, you will immerse yourself in the world of data engineering, gaining hands-on experience in Python-based data processing, entity recognition, and linking, while harnessing the capabilities of Microsoft Azure cloud services. You will play a pivotal role in building data pipelines, scraping valuable information, and ensuring data integrity. Additionally, you will

contribute to the development of solutions that drive innovation and investment, making a meaningful impact in the realm of data engineering. If you are eager to explore the convergence of data engineering, entity recognition, and cloud technology, this internship is the perfect opportunity for you.

Key Responsibilities:

- Actively contribute to the development and enhancement of building our knowledge graph.
- Collaborate with the data engineering team to design and implement data pipelines using Python and PySpark, ensuring data quality, reliability, and performance.
- Work on data processing and transformation tasks, optimizing data workflows for efficiency.
- Implement graph quality testing procedures to ensure the integrity and accuracy of graph data.
- Participate in the maintenance and improvement of the lake house-based data repositories.
- Assist in data ingestion and integration processes.
- Collaborate with cross-functional teams to understand data requirements and provide data engineering support.
- Contribute to the development of data engineering best practices and documentation.

Qualifications:

Required:

- Currently pursuing a degree in computer science, data engineering, or a related field.
- Proficiency in Python programming.
- Strong problem-solving skills and attention to detail.
- Eagerness to learn and apply data engineering concepts and techniques.
- Ability to work effectively in a collaborative team environment.
- Interest in data processing, ETL, and data integration.

Preferred (Nice to have):

- Familiarity with Azure cloud services, especially Databricks platform.
- Knowledge of PySpark for data processing.
- Experience with data engineering tools and methodologies.
- Basic understanding of SQL.
- Familiarity with data storage and database concepts, including Data Lake architecture and graph databases like Neo4j.
- Knowledge of CI/CD (Continuous Integration/Continuous Deployment) practices.

Full Stack Developer Intern

Title	Full Stack Developer Intern	Locations	Aix-en-Provence, France
Team	Full Stack	Reports To	Lead Full Stack Developer
Date	2023-10-09	Email	careers@alpha10x.com

About Us

ALPHA10X is a breakthrough FinTech startup positioned to disrupt the \$2.4 trillion-a-year private technology investment market. Applying state-of-the-art artificial intelligence and machine learning, ALPHA10X analyses vast volumes of data that are dynamic, chaotic, noisy, and multi-dimensional, consisting of a collection of connected relationships and parts, to provide the decision intelligence that corporate innovators and technology investors can rely on to generate superior outcomes and alpha. Curating deep knowledge from scientific, innovation and investment datasets, ALPHA10X computes precise analytics and predicts the future with high accuracy. Based on over a decade of R&D, ALPHA10X is the clear frontrunner and market-maker in the race to apply AI to private company investment. Founded in 2018, headquartered in Luxembourg, with R&D centers in France and Morocco, the team of 38 FTEs comprises prominent AI scholars and scientists with PhDs and advanced degrees from elite universities. The board, all investors, includes renowned academics and high-profile business leaders with exceptional track-records. The founder and CEO, Robert Marcus, is a former Sand Hill Road (Silicon Valley) VC, investment banker, public-company CEO, and director on the Microsoft M&A team. The company has signed a partnership with Accenture and deployed several pilots. It has been recognized by Microsoft as one of the leading AI startups in Europe, and by the European Union for market-creating innovations that shape the future. ALPHA10X is purposed to join the emerging class of 'impact unicorns', startups that are valued at one billion dollars or more and improve the lives of one billion people or more.

<https://www.alpha10x.com/>

Job Description

ALPHA10X is searching for a motivated Full Stack Intern to join our dynamic team and contribute to the development of our innovative application. We are looking for an enthusiastic individual who is eager to learn and grow in the world of software development. As a Full Stack Intern, you will have the opportunity to work on exciting projects and gain hands-on experience in building and maintaining software solutions.

Key Responsibilities:

- Collaborate with cross-functional teams to assist in defining and implementing new features, both on the front end and back end of the application.
- Participate in design and code reviews under the guidance of senior developers to ensure adherence to coding standards, architectural principles, and performance requirements.
- Actively engage in an agile, iterative software development process, contributing to code testing, reviews, and integration with the application in a timely manner.
- Assist in developing and implementing testing strategies, including unit testing, integration testing, and end-to-end testing, with guidance from senior team members.
- Support the identification of potential performance bottlenecks and contribute to optimization efforts by following best practices.
- Learn from senior team members and seek guidance on software development best practices while gradually taking on more responsibilities.
- Stay current with emerging trends and technologies in software development, applying your knowledge to contribute to ongoing improvements in the application under the supervision of experienced developers.

Qualifications:

Required:

- Currently pursuing a degree in computer science, Software Engineering, or a related field (Bachelor's degree or equivalent).
- Enthusiasm for software development and a willingness to learn, with prior internship or project experience being a plus.
- Familiarity with HTML5, CSS3, JavaScript / Typescript is a plus.
- Basic exposure to Angular and ReactJS is a plus.
- Basic exposure to NodeJS and NestJS is a plus.
- Willingness to learn and work with REST API integration.
- Eagerness to be part of an agile software development team and learn agile methodologies.
- Strong written and verbal communication skills in English.

If you are a motivated and eager Full Stack Intern looking to gain hands-on experience in the world of software development, we invite you to apply for this valuable opportunity.

Data Scientist Intern

Title	Data Scientist Intern	Locations	Aix-en-Provence, France
Team	Data Science	Reports To	VP, Data Science
Date	2023-10-09	Email	careers@alpha10x.com

About Us

ALPHA10X is a breakthrough FinTech startup positioned to disrupt the \$2.4 trillion-a-year private technology investment market. Applying state-of-the-art artificial intelligence and machine learning, ALPHA10X analyses vast volumes of data that are dynamic, chaotic, noisy, and multi-dimensional, consisting of a collection of connected relationships and parts, to provide the decision intelligence that corporate innovators and technology investors can rely on to generate superior outcomes and alpha. Curating deep knowledge from scientific, innovation and investment datasets, ALPHA10X computes precise analytics and predicts the future with high accuracy. Based on over a decade of R&D, ALPHA10X is the clear frontrunner and market-maker in the race to apply AI to private company investment. Founded in 2018, headquartered in Luxembourg, with R&D centers in France and Morocco, the team of 38 FTEs comprises prominent AI scholars and scientists with PhDs and advanced degrees from elite universities. The board, all investors, includes renowned academics and high-profile business leaders with exceptional track-records. The founder and CEO, Robert Marcus, is a former Sand Hill Road (Silicon Valley) VC, investment banker, public-company CEO, and director on the Microsoft M&A team. The company has signed a partnership with Accenture and deployed several pilots. It has been recognized by Microsoft as one of the leading AI startups in Europe, and by the European Union for market-creating innovations that shape the future. ALPHA10X is purposed to join the emerging class of ‘impact unicorns’, startups that are valued at one billion dollars or more and improve the lives of one billion people or more.

<https://www.alpha10x.com/>

Job Description

We are expanding our team and seeking a Junior Data Scientist to develop machine learning (ML) powered entity discovery and predictive analytics on top our billion-scale investment knowledge graph. Join our growing team of 7 data scientists and work on cutting-edge projects using a modern data stack built around Databricks and Azure. This is the perfect opportunity to grow and contribute to meaningful projects in a multicultural startup that values human-centered approaches.

Key Responsibilities:

As a Junior Data Scientist, your primary duty is to be an integral part of our LLM (Large Language Model)

initiative. You will contribute to the development of an LLM powered solution focused on among other things:

- autonomously training of NER (Named Entity Recognition) models to extract project specific entities.
- fine-tuning small LLMs for versatile information extraction.
- developing AI agent able to build a technology taxonomy from arbitrary topics.

Your efforts will play a pivotal role in meticulously extracting, structuring, and augmenting relevant information to enrich our billion-scale investment knowledge graph, thereby enhancing the value proposition for our product and esteemed clients.

Main responsibilities include but not limited to:

- Participate actively in the LLM initiative, encompassing the development, monitoring, and deployment of LLM-based solutions.
- Take on the development cycle of the AI agent, maneuvering through ideation, planning, execution, and optimization phases.
- Dissect complex tasks into actionable steps, guiding the agent towards precise information extraction.
- Utilize your expertise in machine learning, natural language processing, and external APIs to enhance the agent's capabilities in data extraction, structuring, and integration into the knowledge graph.
- Collaborate seamlessly with cross-functional teams, assimilating requirements, iterating based on feedback, and refining the agent's performance.
- Assess, learn from, and innovate upon the agent's performance to foster continuous improvement.
- Remain updated with the latest advancements in AI, ML, and related domains to ensure the agent's architecture remains robust and contemporary.

Qualifications:

- Master's degree in Data Science, Computer Science or related Engineering fields

Required:

- Knowledge of classic and Deep Learning based Natural Language Processing
- Familiarity with the classic ML tech stack (Numpy, Pandas, Scikit-Learn)
- Python coding skills, OOP, unit testing, Code versioning with Git
- Analytical and problem-solving abilities
- Fluency in English and good communication skills

Preferred (Nice to have):

- Understanding of LLM architecture, training tasks and instruct version of LLM
- Experience with one AI Agent framework (e.g. LangChain, Transformers by HuggingFace, AutoGPT, ...)
- Spark/PySpark experience (ideally with Databricks)
- Experience with NLP (HuggingFace, SpaCy, FastText, ...)
- Experience with Graph Database (NEO4J) and Graph Querying languages (Cypher, SPARQL)
- Experience in at least one deep learning framework (PyTorch, Tensorflow/Keras)

- Understanding of Big Data, specifically distributed training & computing
- Cloud platform experience (Azure, AWS, Google Cloud, etc.)