

Senior Python Developer

JOB SUMMARY

Covalent Solutions (Covalent) is seeking a mission driven, highly motivated and collaborative **Senior Python Developer** who is truly excited about building great products to support one of our clients at the National Institutes of Health (NIH). As a **Senior Python Developer**, you will apply your skills and expertise to create analysis to guide the organization in making data driven decisions.

This opportunity is full-time with Covalent and is on-site in Bethesda, Maryland.

DUTIES AND RESPONSIBILITIES include, but are not limited to:

- Work with the project manager to define success metrics and criteria.
- Ensuring the program/project meets success parameters and business objectives stated in the project plan and charter.
- Providing transparency and communication on project status and risks to project stakeholders.
- Analyze and understand pre-existing software baseline so that they can be maintained and enhanced based on user needs.
- Design and implement new software modules to aid the organization in data driven decisions.

QUALIFICATIONS

Education

- Bachelor's or Master's in Computer Science, Computer Engineering or Electrical Engineering

Work Experience

- 8+ Experience with Agile methodology.
- 5+ years of Artificial Intelligence and/or Machine Learning
- 8+ years of the following
 - **Application Development:** Writing efficient, reusable, and scalable code in Python and/or R to develop various applications, from web and desktop applications to data analysis tools and automation scripts.
 - **Requirement Analysis:** Collaborating with stakeholders to understand and analyze business requirements, and translating these requirements into technical specifications and solutions.
 - **Design and Architecture:** Designing the architecture of software solutions, including data models, user interfaces, and system integration. Ensuring the architecture meets performance, scalability, and security requirements.
 - **Testing and Debugging:** Writing unit tests, integration tests, and functional tests to ensure the reliability and quality of the code. Debugging and resolving issues in existing applications to enhance performance and functionality.
 - **Deployment and Maintenance:** Managing the deployment process of applications to production environments. Providing ongoing support and maintenance, including bug fixes, updates, and enhancements based on user feedback and technological advancements.

- **Database Management:** Designing, implementing, and managing databases using SQL (e.g., PostgreSQL, MySQL) and NoSQL (e.g., MongoDB) technologies. Writing efficient queries and optimizing database performance.
- **Web Development:** Developing web applications using frameworks like Django, Flask, or FastAPI. Implementing RESTful APIs and ensuring seamless integration with front-end technologies.
- **Data Analysis and Machine Learning:** Utilizing libraries such as Pandas, NumPy, Scikit-learn, TensorFlow, and PyTorch for data analysis, machine learning, and artificial intelligence projects.
- **Scripting and Automation:** Creating scripts to automate repetitive tasks, data processing, system administration, and other automation needs.
- **Code Review and Documentation:** Participating in code reviews to ensure code quality and adherence to best practices. Creating and maintaining documentation for the codebase, including technical specifications, user guides, and API documentation.
- **Performance Optimization:** Analyzing and optimizing application performance, including code refactoring, caching strategies, and other performance enhancement techniques.
- **Security:** Implementing security measures to protect applications from vulnerabilities and threats. This includes managing authentication and authorization, encrypting data, and adhering to security standards and best practices.
- **Collaboration:** Working closely with other developers, project managers, designers, data scientists, and QA testers to ensure project goals are met. Participating in agile development practices like daily stand-ups, sprint planning, and retrospectives.
- **Continuous Learning:** Staying updated with the latest developments in the Python ecosystem and related technologies. Continuously improving skills and knowledge through training, attending conferences, and reading relevant literature.

COMPETENCIES

Professionalism:

- Sharp eye for detail.
- Proven ability to manage multiple tasks concurrently and in different phases of work at the same time. Flexibility and adaptability to perform in a fast paced and dynamic environment. Context-switching does not bother you.
- Effectively collaborates and influences people at all levels in the organization through strong interpersonal and communication skills.
- Highly organized with strong time-management skills.
- Ability to manage conflict and drive resolution.
- Focused on results, proactive, service oriented
- Can focus on both high level and detail level, knowing which is appropriate for the situation.
- Ability to self-direct and manage ambiguity.
- Ability to take in a lot of disparate information and find common themes, recommend clear paths forward and iterate.

- Motivated by professional rather than personal concerns.
- Show persistence when faced with difficult problems or challenges.
- Naturally curious about things you don't understand and actively look for opportunities to grow and learn from those around you.

Communication:

- Actively participate in meetings and be willing to advocate for what you believe in. Provide thoughtful, constructive review of others' work, knowing that everyone is working towards the same objective.
- Superior written and verbal communication skills. You can always articulate the "why" behind your solutions.
- Listen to others, correctly interpret messages from others and respond appropriately.
- Ask questions to clarify, and exhibit interest in having two-way communication.
- Tailor language, tone, style and format to match the audience.
- Demonstrate openness in sharing information and keeping people informed.
- Speak intelligently about a wide variety of topics but know when to say, "I don't know."

Teamwork:

- Work collaboratively with colleagues to achieve organizational goals.
- Place team agenda before personal agenda.
- Support and act in accordance with the final group decision, even when such decisions may not entirely reflect your own position.
- Share credit for team accomplishments and accept joint responsibility for team shortcomings.

Accountability:

- Take ownership of all responsibilities and honor commitments.
- Deliver outputs for which you have responsibility within prescribed time, cost and quality standards.
- Operate in compliance with organizational regulations and rules.
- Take personal responsibility for your own shortcomings, where applicable.

**If you are interested, please send your resume to
jobs@covalentsolutions.com.**