

## **Job Description: Innovation Engineer (Artificial Intelligence) for REDX WeSchool, Mumbai**

Qualifications: Bachelors and/or Masters degree with 2 to 3 yrs of experience in Artificial Intelligence and Machine Learning/ Deep Learning.

### **Job Description:**

- Position required for end-to-end Industrialization of Innovation & Research in Artificial Intelligence, Machine Learning, Deep Learning and NLP.
- Job entails developing multiple solutions in the space of AI for industries such as Manufacturing, Construction, Retail, Automotive, Energy and Consumer.
- The job involves interacting with industry players to understand business problems, operations bottleneck, process limitations, customer sentiments and come with a well- defined problem statement that can be taken towards solutioning using various AI tools. This necessitates market research, voice of customer, business case creation, business model analysis, market/customer solution validation etc.
- Will work on a specific project to improve the quality within the production process.
- Design, architect and develop front-end, worker, backend and communication components.

### **Skills:**

- Demonstrated experience translating qualitative, quantitative and secondary research into actionable insights and strategize opportunities for product development.
- Expertise in managing the whole project development cycle: from domain research to analyzing problem areas, from ideation to defining problem statement, from gathering relevant data to algorithm development and refinement, leading to deployable solutions.
- Solid understanding of core concepts in supervised learning, unsupervised learning and reinforcement learning.
- Previous experience of working on projects implementing algorithms in domains such as Computer vision/ Natural language processing/ speech processing/ Numerical data analysis (for problems like face detection, object detection, sentiment analysis, summarization, text to speech, language translation, etc.)
- Knowledge of deep learning algorithms such as Convolutional neural networks (CNN), Recurrent neural networks (RNN - LSTM- GRU), Deep Q network.
- Good at Coding languages: Python/JavaScript/R/C++/ Lua/MATLAB.
- Functional Knowledge and usage of Frameworks: Git, Tensorflow, PyTorch, CNTK, MXNET, Caffe, Keras, Fastai, OpenAI Gym
- Know-how of Big Data Platforms: Hadoop/ Spark.
- Proficiency in deployment of Cloud computing platforms: AWS/ Google Cloud/ Azure/ IBM Bluemix/ Google Colab,
- Good grasp of Package managers: Docker/ Anaconda.

- Acquainted with Packages/ Library used by Data Scientists: Scikit-learn, NLTK, Gensim, request, BeautifulSoup, Scrapy, Spacy, Matplotlib, OpenCV, Pandas, NumPy, IPython, Jupyter, etc.
- Good Coding skills: Dynamic programming, Mathematical modelling, Web Scraping, Data pre-processing and cleaning, building GUI, Exception handling, Code version control
- Ability to Test and evaluate theoretical models and algorithms.
- Possesses an innate curiosity for strongly understanding people, culture, and behavior.
- Ability to work together with an interdisciplinary team in a synergistic manner.
- Partner well with others from different disciplines to integrate input from various sources and solve problems
- Experience facilitating stakeholder relationships through workshops and collaborative work sessions.

Day-to-Day: While this list is by no means exhaustive, it is meant to give you an idea of what you can expect to do daily.

- Lead and manage 'Research and Development' projects.
- Plan and conduct qualitative research, analyze field data, and clearly communicate insights and innovation opportunities to the team and collaborators.
- Perform comprehensive analyses of the competitive landscape, stakeholder ecosystem, market forces, and trends shaping the industry.
- Simplify complex information from multiple sources into clear and impactful insights, frameworks, and narratives.
- Lead the definition of a new product and/or service, offering opportunities of innovation that delivers new value in terms of novel research concepts, translating proven research into real-world product/ service, scaling adoption of best practices with product interventions, developing products with the potential of having IP, etc.
- Sketch an idea, prototype it, validate it and refine the experience.
- Provide thought leadership (i.e. writing, speaking, publishing, patenting, etc.) and constantly contribute to REDX WeSchool's growing IP.

### **REDX WeSchool, Mumbai**

REDX WeSchool is a vibrant ecosystem based on rolling out new and innovative commercial and citizen-based technologies to create a framework to support the wide-ranging needs of urban populations and corporations. As a REDX innovator, you will be responsible for research, design, development, and test of ideas that will impact billions. At REDX WeSchool you will have access to great mentorship, latest prototyping tools and a supportive environment of like-minded people with diverse skill sets. You will receive active mentorship from world-class experts and support with state-of-the-art infrastructures (hardware, software, and design) like Computing machines, GPU clusters, 3D printers, and several rapid prototyping tools. Bring passion and dedication to your job and there's no telling what you could accomplish. Imagine what you could do at REDX!