AI Robotics Engineer

Job title	*AI Robotics Engineer*
Reports to	*CTO*

Job purpose

Bright Apps LLC is seeking a driven, creative, inquisitive, and focused Robotics Engineer to join our team. This role will support Bright Apps LLC, lending technical knowledge and analytical expertise, helping develop products that drive the business forward.

We are looking for a problem-solver. You must be curious and focused on the future to excel in this position. A strong candidate will dive into new technologies, applying them to current needs while never losing sight of future innovations.

The perfect candidate will push the boundaries of what's possible while executing current long-term objectives. This position will work both on Brights Apps government AI work in addition to internal Bright Apps Projects.

This data scientist will report to the CTO to brainstorm, present concepts, and work products, driving innovation forward. This position requires professionalism, understanding and the ability to deliver information clearly and concisely. The perfect candidate will feel comfortable presenting projects to diverse audiences while also taking constructive feedback and have a willingness to collaborate.

Duties and responsibilities

- Work with AI/ML algorithms both to enable the Azoth AI work for Fly and Find Drone missions along with AI/ML to optimize Space Force Guardians service assignments reporting to the CTO
- Working directly with NLP style technologies at Bright Apps on the US Space Force project
- Creating new ways to extract features from disperse Space Force Data
- Working directly with Bright Apps Labs for automated self-flying AI controlled drones
- Evangelize and educate data sciences and the teams' products throughout the business through effective communication and simple to understand use cases
- Conduct exploratory data analysis and experimental designs to drive new hypotheses for new innovation trials
- Understanding business objectives and developing models that help to achieve them, along with metrics to track their progress
- Analyzing the ML algorithms that could be used to solve a given problem and ranking them by their success probability
- Exploring and visualizing data to gain an understanding of it, then identifying differences in data distribution that could affect performance when deploying the model in the real world

- Verifying data quality, and/or ensuring it via data cleaning
- Supervising the data acquisition process if more data is needed
- Finding available datasets online that could be used for training
- Defining validation strategies
- Defining the preprocessing or feature engineering to be done on a given dataset
- Defining data augmentation pipelines
- Training models and tuning their hyperparameters
- Analyzing the errors of the model and designing strategies to overcome them
- Deploying models to production

Qualifications

- Competent using data science tools, libraries, and frameworks (NLP, Scikit-learn, NumPy, SciPy, Pandas, TensorFlow, PyTorch, Pandas, doc2vec, word2vec, general clustering and vector math)
- Competent with computer vision via PyTorch and OpenCV via Python
- Understanding business objectives and developing models that help to achieve them, along with metrics to track their progress
- Managing available resources such as hardware, data, and personnel so that deadlines are met
- Analyzing the ML algorithms that could be used to solve a given problem and ranking them by their success probability
- Exploring and visualizing data to gain an understanding of it, then identifying differences in data distribution that could affect performance when deploying the model in the real world
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Working conditions

This position is 40 hours per week, hourly, remote position. Will require ability to work independently