

# Senior Data Scientist

## *Job Description*

This document outlines what we currently consider to be the main responsibilities of and skills you'll need to successfully carry out your role.

As a scale-up, we've learned that a job description can be something of a moving target and that roles often flex with the skills and interests of the person as much as the needs of the business.

Equally important, then, are the feedback, coaching, performance management and career progression processes you will participate in as a Wordnerd.

We strive to create a culture that is clear about what we need from you, how you're doing and the impact your efforts have on the business.

At the same time, we encourage you to engage with us about what you need and want to set you up for success at Wordnerds and beyond.

## Responsibilities

As a Senior Data Scientist, you will serve as part of our wider Product team, helping them build the Wordnerds Platform. Your responsibilities include:

### Build tech that derives information from text data

- Building and delivering of data science solutions as part of a cross-functional team
- Use your expert knowledge in machine learning approaches to help set the technical vision and strategy of Wordnerds

- Ensure the approaches taken to data enrichment within Wordnerds are accurate and well-implemented
- Stay up to date with new developments in Data Science and advocate where appropriate to embrace them in Wordnerds

## Team Collaboration

- Work effectively as part of a multi-disciplinary scrum team
- Participate constructively in code reviews
- Collaborate with stakeholders to scope, plan, prioritise, and deliver the product vision
- Ensure effective communication and knowledge sharing within the team

## Maintain the existing Data Science technology at Wordnerds

- Maintain the existing codebase/applications
- Ensure the current applications are running smoothly and are patched
- Fix bugs discovered in existing applications

## Skills, Behaviours & Outcomes

### Platform Expertise

- Become an expert in the Wordnerds tool, capable of troubleshooting issues and optimising customer usage.

### Data Science

- Knowledgeable about the core tools required by Wordnerds for data science and advanced best practices on how to use them. These tools include
  - PyTorch
  - Scikit-Learn
  - Numpy
  - Pandas
  - etc.

- Expert in data science & machine learning algorithms and techniques and advise on how best to use them at Wordnerds, this includes
  - LLMs
  - Clustering algorithms
  - Neural Networks
  - Sentence Embeddings
  - etc.

## Data Engineering

- Experienced in handling large datasets across a range of databases, including
  - MongoDB
  - MySQL
  - ElasticSearch
  - BigQuery
- Knowledgeable about efficiently handling these databases for querying and data ingestion.
- Able to manage the infrastructure running the data science services, including:
  - AWS Elastic Container Service
  - GCP BigQuery
  - AWS DocumentDB

## Python Development

- You will be experienced in the use of Python for building basic web applications
  - Flask
  - Gunicorn
  - Redis Queues
  - API interaction
- GIT version control
- Automated Testing (Pytest currently)

## Metrics & Targets

- **Product Vision:** Contribute to the delivery of quarterly projects by improving the speed, flexibility, accuracy and depth of our product offering
- **Value added to data:** Consistently work to improve the accuracy and usefulness of the Data Science based enrichment and analysis of data within the Wordnerds Platform
- **Performance:** Leading the continuous improvement of our processes to ensure a high-performing team, using KPIs to measure and track performance objectively

## Teamwork

### Inter-team

- Work well with team members and contractors to collaborate, ideate and problem-solve.
- Create and adhere to clear systems and processes that are followed and monitored.
- Give and receive clear, honest and kind feedback to other members of the team.

### Intra-team

- Collaborate closely with Sales and Customer Success teams to align efforts with business objectives.
- Ideate and problem-solve with other departments.
- Support and consult other teams appropriately.
- Contribute to a positive and harmonious work environment.
- Give and receive clear, honest and kind feedback to members of other teams, including the leadership team and directors.

## Innovation

Innovation is the process of implementing new ideas into Wordnerds so that we constantly improve our ways of working. There are two main types of innovation we need you to deliver:

## Incremental innovation

- Gradual fine-tuning of established systems and processes that layer to achieve greatly more productive work over a long-term view

## Radical innovation

- Step-change ideas that completely reimagine or replace existing methodologies, ways of working and approaches

You should develop a consistent process that allows you and your team to:

## Discover and assess new ideas

- From frameworks and methodologies to technological advancements, what are the tools, tips and techniques you can harness to achieve our business objectives?

## Test ideas efficiently

- Not all innovations are positive. Some have unintended consequences you can't possibly know about at first sight. In this role we expect you to use agile principles to set and share expectations about what specifically we're trying to improve (and why!)
- Gather data quickly to test hypotheses in short feedback cycles
- Iterate on our learnings
- Approve or reject new ideas, based on the data and feedback

## Efficiency

Time is the most scarce resource we have. A hugely important part of your role is to design and implement systems and processes that make the best use of our limited time.

## Eliminate unnecessary work for you and other Wordnerds

- Implement one-to-many opportunities where appropriate

- Automate boring, manual or low-value processes
- Make meetings more productive

### Own your impact

- Ensure that the work you are doing is contributing to the business objectives of the company and making a difference