



Job Description

Role: Vehicle Data Engineer

Reports to:

Date: December 2021

Summary: This job involves taking ownership of Riversimple's data visualisation and analysis toolset, carrying these tools forward as Riversimple's requirements evolve and grow. Over time, develop familiarity with the workings of the Riversimple powertrain and vehicle systems, offering insight into potential causes or reporting on performance and efficiency.

Based in Llandrindod Wells with some remote working, this is a full-time position.

Role description: Riversimple vehicles are equipped with telemetry capability, uploading performance and behavioural data (to an AWS service) as the car is in use. This position is for ownership of the tools that process this vehicle data.

Riversimple have developed two tools to support data visualisation and analysis,

- The first tool focusses on data from single journeys and provides the ability to display time-series signals as plots on a graph, create new data based on existing data (performing various mathematical operations, i.e., creating power from electrical current & voltage), show route data on a map, export data to other formats, compute network bandwidth usage, plus many other functions.
- The second tool provides summary data drawn across many journeys, parsing journey data for particular trigger events, computing efficiencies, compiling summary reports and emailing alerts.

Both tools are written in Python 3 using PyQT, Pandas and Numpy, and are in constant use as part of the vehicle development and test efforts.

Requirements and priorities are driven by vehicle engineers and trial data analysts, along with the development team.

Desired experience:

- Competence in Python 3, PyQT, Pandas, Numpy.
- Agile development mentality.
- Development lifecycle documentation.

Desired qualities:

- A desire to help fight one of the major contributors of climate

change.

- Skill in noticing cause and effect patterns.
- An ability to integrate with a team and be naturally supportive and collaborative.
- The ability to find the clever simplicity that lies beyond complexity, including developing the simplest user interfaces.
- The insight to know when to refactor and when not to.
- A track record of delivering to high specifications.
- Good interpersonal skills with the ability to manage expectations.

About Riversimple: Riversimple is a sustainable transport company developing hydrogen-powered fuel cell vehicles. Riversimple is a Circular Economy business.

Based in Llandrindod Wells, in mid-Wales, Riversimple has a track record of exceptional innovation and a dogged determination to get things right. It has won multiple awards including the SIMMs Medal for outstanding contributions to motoring innovation and is a member of the Ellen MacArthur Foundation CE100.

Riversimple has on-going collaborations with Siemens, the Office for Zero Emission Vehicles, Milford Haven: Energy Kingdom, Innovate UK and the Circular Revolution.