

Machine Learning Expert

- Innovative wave energy technology developer
- Permanent role based in Fremantle
- Work across a multi-disciplinary team

Carnegie Clean Energy Limited is a renewable energy technology company, focused on developing its world leading patented CETO wave energy technology. The global potential for marine renewable energy is enormous and Carnegie is well positioned to capitalise upon this. Carnegie is working to significantly improve the CETO design by utilising a capital efficient, digital development pathway.

Carnegie is seeking an enthusiastic individual with a solid understanding in the application of ML to engineering problems. They will join the technical team and work closely with other engineers across a broad range of disciplines in executing the technology development plan. Reporting to the Carnegie's Chief Technology Officer, this position will be responsible for the development of ML algorithms for the control of CETO, as well as for wave prediction.

The Position:

- Accelerate the development of Machine Learning models to estimate wave elevation and wave forces using supervised deep learning tools
- Develop and implement a Machine Learning controller for the CETO technology using various approaches including Reinforcement Learning
- Author and review detailed technical reports relating to Machine Learning activities and CETO development
- Define training data required to train the models developed
- Collaborate closely with Carnegie's Data Analyst and Hydrodynamic Engineer to ensure appropriate development of models and production of suitable input data
- Support the planning, preparation, completion and reporting of physical tank testing or other experimental activities conducted to produce input data for the ML models or to test the model developed

The Candidate will possess the following:

- A positive and collaborative approach to problem solving in a team environment

- Experience solving engineering problems, and a solid understanding of the principles of physics such as forces, momentum, energy, wave propagation, etc...
- The ability to own a problem and drive the work to solve it autonomously, which may include:
 - Planning the work
 - Reviewing existing science
 - Performing technical work
 - Identifying, starting and managing key partnerships
 - Respectfully challenging the work of others
- Bachelor's degree or equivalent in Computer Science, physics or relevant engineering field
- 5+ years' experience in Machine Learning or a similar role, including Reinforcement Learning

The following would be well regarded:

- PhD in a related field
- Experience with control of physical systems
- Trained in Mechanical engineering
- Trained in Hydrodynamics
- Experience in marine-energy applications (wave / tidal)

The Company offers:

- The chance to work in a rewarding company and be part of developing and demonstrating a world class and world first renewable energy technology
- A competitive remuneration package will be offered in line with relevant experience and skills

Applications, including covering letter, CV and answers to the application questions below, should be forwarded to careers@carnegiece.com in PDF format with "ML Expert" in the subject title. Only shortlisted applicants will be contacted. Confidentiality is assured.

Application Questions

Are you eligible to work in Australia?

How many years experience do you have in a similar role?

What is your expected salary?

Do you have a relevant degree or tertiary qualification?

Describe your ideal work environment in 3 words.