**University of Auckland Data Science Academic Project**

**Realtime Visualization and Interaction Toolkit**

**Company Background:**

N/A

**Overall Aim/ Goal:**

Advance development of real-time visualization and interaction toolkit for visualizing and interacting with computational models.

**Project Duration:**

1 or 2 semesters

**Project Description:**

The Realtime Visualization and Interaction Toolkit (RVIT) is an in-development library/framework to facilitate the development of interactive computational models.

Source code and links to documentation can be found here:

<https://github.com/matthew-egbert/rvit>

And a short abstract has been published regarding the purpose of this tool. It can be found here:

Egbert M. D. (2019) [Real-Time Visualization and Interaction with Computational Artefacts](http://www.matthewegbert.com/files/egbert_MethAL_2019.pdf). Abstract accepted for oral presentation at MethAL workshop at ALIFE2019.

In this project, we would work to further the development of this tool. This would include elements of bug-fixing, documentation, and the addition of new functionality.

**Data:**

N/A

**Desired Output:**

See above.

**Who are we looking for? / Preferred Skills:**

Students with experience in any (not all!) of the following would be preferable.

* Python
* The Kivy framework for GUI development
* OpenGL Shaders

**Available Resources:**

See above.

**Constraints:**

N/A

**Contacts from (Company Name):**

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