THE UNIVERSITY OF WESTERN AUSTRALIA

Bachelor of Philosophy (Hons)

GCRL2000 BPhil Research Placement Agreement Form

To be completed **by BPhil (Hons) students** with input from their research mentor.

1. Student Details

Family Name	ZHOU
Preferred First Name	JESSE
Student Number	22465482
Are you on a Direct Pathway? If yes, please specify.	NO

2. Course Information

Degree-specific Major	MATHEMATICS
Second Major (if relevant)	PHYSICS

3. Mentor Details

Title	Prof.
Name	Michael Small
Centre/School	Maths & Stats
Position	CSIRO-UWA Chair

4. Placement Details

Schedule of Meetings (please specify dates)	First	~~30/6/2019~~ 25/6/2019
	Second	~~27/7/2019~~ 2/7/2019
	Third	~~24/8/2019~~ 23/7/2019

5. Compliance

Will the student require specialized training?	No.
If yes, please specify what type (e.g. safety induction, equipment)?	/
Date Completed	/

Students on placement are covered by UWA student placement cover. Please note the conditions (http://www.student.uwa.edu.au/life/insurance/placement)

6. Agreed Research Activities (to be completed by the Student)

After consulting with your mentor, summarize in your own words the nature of the planned activities. Refer to the GCRL2000 unit outline to ensure that all outcomes will be met by the placement (seminar attendance, ethics, etc). Attach a separate sheet if necessary.

Complex systems form a large part of the real world, with examples being the internet, community etc. The research is to investigate the behaviour of such systems under different conditions in various fields including finance, health and others.
- Reading Research: Reading of background theory behind complex networks including concepts such as reservoir modelling, non-linear diagnostics and time-series analyses. Texts will be provided by Professor Small and we will discuss any queries I have around these concepts at meetings. Time: 2 hours x 5 days x 5 weeks = 50 hrs
Learning outcomes: c, d
- Programming: Test certain scenarios in complex systems by simulating the changes through programming in various languages such as C/C++, python, Julia and more. Time: 3 hrs x 5 days x 5 weeks = 75 hours
Learning outcome: d

7. Confirmation

As a student, I have consulted with my mentor and understand the terms of my placement.

Signature: [illegible]

Date: 7/6/19

As a mentor, I am aware of the terms under which I mentor this student (for details, see http://www.research.uwa.edu.au/staff/research-policy).

Signature: [illegible]

Date: 7/6/19

8. Other Comments

Any further comments

Further Research activities

- Research Group Meetings: meeting with supervisor and other members of the complex systems research group. To discuss progress of methods and results. Time: 3x 1.5 hours = 4.5 hours. Learning outcomes: a, b