# The University of Auckland Examiner's Report on Masters Thesis / Research Portfolio

Candidate Name: Junhuang Xue Student ID: 6365553 Degree: STAT-MSC

Thesis title: Anomaly Detection in Patient Arrival, with Bayesian Hierarchical Models

#### Part 2 – Comments for student

#### This section will be released to the candidate at the completion of the examination process

The examiner is requested to provide feedback for the student and also to list any minor editorial changes that they consider should be made before the thesis is lodged in the Library. Please note that in order to accommodate your detailed and comprehensive comments, the boxes below are expandable.

## Summary of the contribution made by the thesis/research portfolio and the key strengths and weaknesses of the work

These are covered in my separate report.

Expand box as required

Criteria	Examiner's comment
Show evidence of advanced knowledge about a specialist field of enquiry	The student has found and appropriately summarised a set of papers from the literature.
Demonstrate mastery of sophisticated theoretical subject matter	There is evidence of an understanding of statistical theory, but this is the weakest part of the thesis.
Evaluate critically the findings and discussion in the literature	As noted above, the student has collected findings from the literature and discussed them appropriately.
Research, analyse and argue from evidence	This is a dimension of the theoretical understanding which is the student's weakest point. The student does show evidence of being able to argue from the evidence (as noted in my report), although there are situations in the thesis where this has not been done correctly.
Engage in rigorous intellectual analysis, criticism and problem-solving	The student has clearly demonstrated technical ability in the implementation of the research.
Demonstrate a high order of skill in the planning, execution and completion of an original, independent research project	I can't judge the extent to which the student planned this research, but the logic of its structure is appropriate for an investigation of this kind.
Apply research skills appropriately	The student has demonstrated research skills in the literature review, simulation study and real data application.

### Recommended minor editorial corrections to thesis, if any (not applicable to research portfolios)

Minor corrections include inconsistency in terminology, referencing problems, and typographical errors.

Lists of typographical errors, while welcome, are not expected.

Annotated electronic or hard copies may be sent to the Faculty Student Centre if preferred.

Please note that students are not allowed to make more extensive revisions to their theses.

Please see my report.

Expand box as required