LTCC Basic Course

Title: Stochastic Processes

Basic Details:

- Core Audience: 1st year students, pure or applied stats/maths
- Course Format: 5 x 2hr lectures

Course Description:

- Keywords: Markov chains and related processes, point processes, coupling, entropy.
- Syllabus: This course will start with the basics of Markov chains and sample some applications and related stochastic processes. The content and style of presentation will depend on the background and interests of the students. We plan to present the material in such a way that a variety of students will enjoy the course. There will be an opportunity to code and program in R as part of this course. We will also consider other topics such as entropy and ergodic theory, depending on time and interest.
- Recommended reading: Notes will be provided.
- Additional Optional reading: https://tsoo-math.github.io/ucl/skeleton.html
- Prerequisites: Undergraduate probability.

Format:

- Lecture notes will be provided.
- Some lecture videos will also be available.
- The live sessions will have both a lecture and workshop component.
- Exercise sheets will be available to help students keep up with material.

Lecturer Details:

- Lecturer: Terry Soo
- Lecturer home institution: UCL Department of Statistical Science
- Lecturer e-mail: t.soo@ucl.ac.uk