

# Dr. Nantawat Udomchatpitak

## **Research Activities**

### **Area of Expertise**

Probability (focusing on stochastic models on genetics and evolution)

### **Current Research Interests**

My main research interest is studying stochastic models in both theoretical perspectives and their applications. To be more specific, I am interested in the models from population genetics, epidemiology, chemical reactions, statistical mechanics, and queueing theory. The basic mathematical tools used to analyze these models are Markov processes, martingales, and stochastic differential equations (SDE). Beside these main interests, I am also interested in graph theory, random graphs, and network theory, which sometimes have applications in stochastic epidemic models.