

AMA Students

Received the Best Results among
other Hong Kong Students at the

U.S. Mathematical Modeling Contest

Team Members, Li Shihao, Shi Yu and
You Mengqiao. Advisor, Dr. Daihai He
(from right to left).

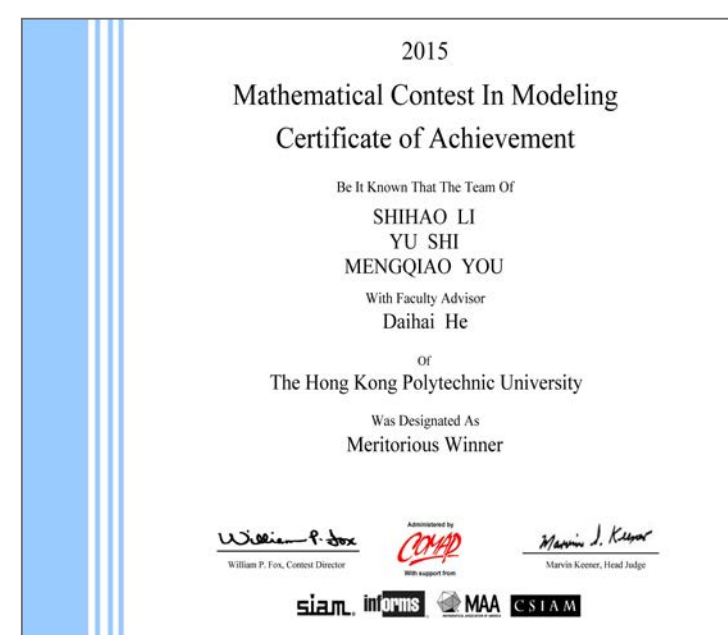
Congratulations to our Undergraduate Investment Science students who recently won the Meritorious Award at the U.S. Mathematical Contest in Modeling!

The 31st Annual Mathematical Contest in Modeling (MCM) was organized by the Consortium for Mathematics and Its Applications (COMAP). This international contest aims to challenge students to clarify, analyze, and propose solutions to open-ended problems.

This year, three AMA students, Li Shihao, Shi Yu and You Mengqiao, teamed up to participate in this contest. They proposed two mathematical models to optimize the eradication of Ebola, which are briefly described below:

Ebola Outbreaks and Control Modeling

We attempt to optimize the eradication of Ebola through two models. We focus on three hardest hit West African countries – Guinea, Sierra Leone and Liberia. The first model is an expanded SEIR compartmental model. We incorporate seasonal, behavioral and treatment parameters to match the practical situation and limited medical supplies condition. We also take into account the possibility of infection due to improper handling of infected dead bodies. In the second model, we design a local delivery system after considering both disease severity and travelling distance.



There were 7,636 participating teams representing institutes from 17 countries. Our team ranked in the top 9% (i.e. top 663 teams) to be designated as Meritorious Winners, and they received the best results among all teams from Hong Kong! This news was indeed very encouraging and inspiring to our students and the Department.

For more details, please visit the link below:

http://www.comap.com/undergraduate/contests/mcm/contests/2015/results/2015_MCM_Problem_A_Results.pdf