Grant L. Bilker

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Actuarial Exams & Education

P Exam - Society of Actuaries   **January 2018**

Rutgers University - New Brunswick | School of Arts and Sciences   **August 2017**
Bachelor of Arts in Mathematics | Minor in Biological Sciences
Related Coursework:

Linear Optimization	Mathematical Theory of Statistics	Discrete and Probabilistic Models in Biology
Linear Algebra	Mathematical Theory of Probability	Advanced Calculus for Engineering

Activities:

Rutgers University Powerlifting, University Choir, Facilitator for GO Outdoors, Assistant for Chinese Calligraphy, Rutgers Global Network, Rutgers University Chinese Conversation Club

Skills & Interests

Mathematics:

Linear programming, Integer programming, Cryptology, Probabilistic/Discrete/Dynamical Modeling, implementation of higher dimensional mathematics, Statistical Methodology

Sciences/Programming:

Java, Python, Bash, PyMOL, R, Maple, MATLAB, Mathematica, Tableau, MS Office, G Suite, WordPress, HTML, Protein Characterization Methodology (BLI, DLS, ELISA, TEM), Protein Production, Enzyme Kinetics Analysis and Modeling, Buffer Creation, Biochemistry, Molecular Biology, Analytical Chemistry

Languages:

English, Chinese (Mandarin), French, Korean (can read)

Interests:

Number Theory, Piano/Flute/Guitar, Languages/Culture, Julia, The Coffin Problems, Martial Arts, Tennis

Work Experience & Projects

Center for Integrative Proteomics Research - Piscataway, NJ   **July 2016 - November 2016**
Biomod 2016 Researcher ~15 hrs/wk
- Performed cloning, mutagenesis, and expression of atrazine A, B, and C enzymes in E. Coli
- Conducted experiments using BLI, DLS, ELISA, and TEM for enzyme characterization
- Computational modeling of enzyme kinetics, structure, and energy in pymol, python, java, and bash as part of the analysis of the nanobiomachinery for the 2016 Biomod competition

Rutgers Learning Centers - New Brunswick, NJ   **September 2013 - June 2015**
Tutor ~15 hrs/wk
- Subjects: Precalculus, Calculus 1, 2, 3, and 4, Linear Algebra, General Chemistry, Honors Physics, and Logic
- Handled a dynamic group of individuals (varying skill levels and duration of stay)
- Provided in-services for new tutors to train them

Center for Advanced Biotechnology and Medicine - Piscataway, NJ   **May 2014 - September 2014**
Undergraduate Research Assistant ~15 hrs/wk
- Carried out fermentation, expression, and purification of numerous proteins from the Protein Data Bank
- Compounded different buffers in large quantity and pH'ed them to the correct level

Leadership & Volunteering

Intensive ESL School at Princeton - Princeton, NJ   **July 2015 - August 2015**
Teacher ~30 hrs/wk
- Taught a group of 50 students English through various methods and levels of engagement

Qingdao Technical University - Qingdao, Shandong, China   **July 2013 - August 2013**
Teacher ~40 hrs/wk
- Taught English at a conversational level to 5 groups of 20 students each