Anthony Almudevar - Teaching and Mentoring Experience

- 1. Courses Taught
- 2. Mentoring Roles
- 3. PhD, Master's and Bachelor's Degree Thesis Committees

1. Courses Taught

2021 University of Rochester
BST512 Inference for Graphical Models (Graduate Level)
BST411 Statistical Inference (Graduate Level)
2020 University of Rochester
• BST412 Large Sample Theory (Graduate Level)
BST411 Statistical Inference (Graduate Level)
2019 University of Rochester
CSC265/465 Intermediate Statistical and Computational Methods
(undergraduate/graduate, Dept. Computer Science/Data Science)
2018 University of Rochester
BST411 Statistical Inference (Graduate Level)
 CSC265/465 Intermediate Statistical and Computational Methods
(undergraduate/graduate, Dept. Computer Science/Data Science)
CSC462 A Computational Introduction to Statistics (graduate, Dept. Computer
Science/Data Science)
2017 University of Rochester
BST411 Statistical Inference (Graduate Level)
CSC265/465 Intermediate Statistical and Computational Methods
(undergraduate/graduate, Dept. Computer Science/Data Science)
• CSC262/462 A Computational Introduction to Statistics (undergraduate/graduate,
Dept. Computer Science/Data Science)
2016 University of Rochester
CSC265/465 Intermediate Statistical and Computational Methods
(undergraduate/graduate, Dept. Computer Science/Data Science)
BST511 Topics in Statistical Inference (High Dimensional Data Analysis)
(Graduate Level)
 BST433 Computational Systems Biology (Graduate Level)
• CSC262/462 A Computational Introduction to Statistics (undergraduate/graduate,
Dept. Computer Science/Data Science)

2015 University of Rochester
CSC262/462 A Computational Introduction to Statistics (undergraduate/graduate,
Dept. Computer Science/Data Science)
• CSC262/462 A Computational Introduction to Statistics (undergraduate/graduate,
Dept. Computer Science/Data Science)
2014 University of Rochester
BST432 Introduction to Bioinformatics (Graduate Level)
• CSC294 A Computational Introduction to Statistics (undergraduate/graduate, Dept.
Computer Science/Data Science)
2013 University of Rochester
BST463 Introduction to Biostatistics
2006, 2010, 2012 University of Rochester
BST520 Topics in Bioinformatics (Graduate level)
2003-2005, 2007, 2011 University of Rochester
BST411 Statistical Inference (Graduate Level)
2009 University of Rochester
BST497 Seminars in Statistical Literature (Graduate Level)
2002-2003 Acadia University
Statistics for Business and Behavioural Sciences I
Regression
2001-2002, Acadia University
Statistics for Business and Behavioural Sciences II
Statistics for Life Sciences I, II
Applied Probability for Science and Engineering I
2000-2001, Saint Mary's University
Statistics of Business and Behavioural Sciences II)
• Introduction to Mathematical Statistics (2nd, 3rd year)
• Stochastic Processes (3rd, 4th year, with graduate students)
Calculus for Engineers II (2nd, 3rd year)
1999-2000, Saint Mary's University
• Survey of Statistics (1 st year)
Introduction to Probability (2 nd , 3 rd year)
1998-1999, Dalhousie University
Advanced Statistical Theory (Graduate Level) Introduction to Statistical for Social Work (all basels)
Introduction to Statistics for Social Work (all levels)
Introductory Statistics for Sciences and Health Sciences (1st Year)
 1997-1998, Dalhousie University Advanced Statistical Theory (Graduate Level)
• Advanced Statistical Theory (Graduate Level) 1996-1997, Dalhousie University
 Introductory Statistics for Sciences and Health Sciences (1st Year)
 Probability (Graduate Level)

1995-1996, Dalhousie University

- Introductory Statistics for Sciences and Health Sciences (1st Year)
- Introduction to Probability and Statistics (1st and 2nd Year)
- Probability (3rd and 4th Year)

1994-1995, Dalhousie University

- Introductory Statistics for Sciences and Health Sciences (1st Year)
- Intermediate Statistical Theory (3rd and 4th Year)
- Probability (Graduate Level)

1993-1994, Dalhousie University

- Introductory Statistics for Sciences and Health Sciences (1st Year)
- Statistical Methods for Data Analysis and Inference (2nd Year)
- Stochastic Processes (Graduate Level)

1992-1993, University of Toronto

• Introductory Statistics for Engineers (2nd Year)

1991-1992, University of Toronto

• Operations Research (3rd and 4th Year)

1990-1991, University of Toronto

• Operations Research (3rd and 4th Year)

2. Mentoring Roles

CSC899 Masters in Computer Science Research Project (Spring 2019) Zonglin Li, Jun Liang, Yanzhao Liang

CSC899 Masters in Computer Science Research Project (Fall 2018) Jiashun Liu

CSC899 Masters in Computer Science Research Project (Fall 2018)

Jiechun Liu, Jiashun Liu

Postdoctoral Supervisor (2010-2015) Matthew McCall Department of Biostatistics And Computational Biology

Dr. McCall worked with me primarily in the area of gene regulatory network modeling, and also on biomarker development. He was awarded a K99/R00 NIH Pathways to Independence Award in 2014. He is currently Associate Professor in the Department of Biostatistics and Computational Biology at the University of Rochester. We have coauthored six publications.

PhD Thesis Advisor (2012-2015) Thanh Van Tran Department of Biostatistics and Computational Biology

Ms. Van Tran has completed and successfully defended her thesis "Threshold Boolean Network Inference and Experimental Design" in the area of gene regulatory network modeling in 2015. We have one coauthored publication. In 2013 she was awarded a fellowship under the NIH Student Internship Program (SIP) at the National Center for Environmental Health (NCEH). In 2014 she was awarded a fellowship under the National Science Foundation "East Asia and Pacific Summer Institutes for U.S. Graduate Students" (EAPSI) program to fund a summer internship at Monash University, Melbourne, Australia. She was also awarded a travel stipend to present at the 5th International Conference on Systems Biology, Melbourne, Australia (14-18 Sept 2014). She is currently Mathematical Statistician at the U.S. Food and Drug Administration.

Master's Thesis Advisor (2012-2016)

Ben Chapman, Assistant Professor

Department of Psychiatry,

University of Rochester Medical Center

Dr. Chapman has completed and successfully defended his thesis "A False Discovery Rate Upper Bound for Two-Stage Testing" in 2016.

PhD Thesis Advisor (graduated 2011) Jason LaCombe

Dr. LaCombe graduated in 2011 with a thesis on the application of information theoretic techniques in graphical modeling and is currently Director of Research and Development (Genetics Division) at Nature Source Improved Plants. LLC, Ithaca NY. We have coauthored four publications.

Supervisor, Summer Internship (2010) Srujana Reddy Cheguri

I supervised Ms. Cheguri for a summer internship in 2010. At the time she was a master's degree candidate in bioinformatics at the Rochester Institute of Technology. I trained her in the fundamentals of the analysis of microarray data, gene set analysis (including use of the well- known GSEA application), R programming and literature review. Following the internship, Ms. Cheguri was offered a position as a research technician in the laboratory of Dr. Kenneth Offit, at the Memorial-Sloan Kettering Cancer Centre. After completing her degree, Srujana was the first recipient of the Cristine Meredith Miele Fellowship in Computational Genomics and Bioinformatics.

PhD Thesis Advisor (graduated 2009) Linlin Chen

I assumed the role of thesis advisor for Dr. Chen following the sudden death of Dr. Yakovlev in 2008. Her thesis was on correlational structure in microarray gene expression data. She is currently Associate Professor in the School of Mathematical Sciences at the Rochester Institute of Technology. We have coauthored three publications.

Postdoctoral Supervisor (2004-2008) Peter Salzman

Dr. Salzman worked with me primarily in gene regulatory network modeling and was awarded a K99/R00 NIH Pathways to Independence Award in 2007. We have coauthored three publications.

PhD Thesis Co-Advisor (with Joao do Val) (graduated 2007) Edilson Arruda

Electrical Engineering and Computation, University of Campinas, Campinas Brazil

I served as PhD thesis co-advisor with Dr. Joao do Val of the University of Campinas, where Edilson was enrolled as a PhD candidate. His thesis was in the area of functional approximation techniques for Markov decision processes. He graduated in 2007 and is currently Lecturer in Business Analytics/Management Science, Southampton Business School, University of Southampton. We have coauthored 7 publications.

3. PhD, Master's and Bachelor's Degree Thesis Committees

Responsibility	Year of Graduation	Student, Supervisor(s)	Affiliation
PhD Thesis Examiner	2017	Salem Ali S. Alyami Jonathan Keith	School of Mathematical Sciences, Monash University, Melbourne Australia
PhD Thesis Committee	2016	Joseph Ciminelli Tanzy Love, Sally Thurston	Biostatistics and Computational Biology, University of Rochester
Chair of PhD Thesis Defense Examination	2016	Yinghan Fu, David Mathews	Department of Biochemistry & Biophysics, University of Rochester
MS Thesis Committee	2015	Daniel Scarfoni Phillip Guo	Department of Computer Science, University of Rochester
Chair of PhD Thesis Defense Examination	2013	Jingping Xing, Helena Temkin-Greener	Public Health Sciences, University of Rochester
Undergraduate Honor's Thesis Committee	2013	Benjaimin Kellman, Mark Noble	Department of Brain and Cognitive Science, Department of Biomedical Genetics, University of Rochester
PhD Thesis Committee	2014	Iris Chen, Hulin Wu	Biostatistics and Computational Biology, University of Rochester
Chair of PhD Thesis Defense Examination	2012	Hyunjoo Cho, Sema Salur	Mathematics, University of Rochester
PhD Thesis Committee	2014	Katie Evans, Sally Thurston/Tanzy Love	Biostatistics and Computational Biology, University of Rochester
PhD Thesis Committee	2013	Tivadar Papai, Henry Kautz	Computer Science, University of Rochester
PhD Thesis Committee	2010	Miranda Lynch, Sally Thurston	Biostatistics and Computational Biology, University of Rochester
PhD Thesis Committee	2010	Arif Ozgun Harmanci, Gaurav Sharma	Electrical and Computer Engineering, University of Rochester

PhD Thesis	2009	Alex Pearson,	Biostatistics and
Committee		Derick Peterson	Computational Biology,
			University of Rochester
PhD Thesis	2007	Hongyue Wang,	Biostatistics and
Committee		Govind Mudholkar	Computational Biology,
			Mathematics,
			University of Rochester
Chair of PhD Thesis	2006	Yinhe Cheng,	Computer Science
Defense		Mitsunori Ogihara	University of Rochester
Examination			
Reader, Master's	1997	Heather Merry,	Mathematics, Statistics and
Degree Thesis		Chris Field	Computer Science,
			Dalhousie University
Reader, Master's	1996	Xiaoming Sheng	Mathematics, Statistics and
Degree Thesis		Chris Field	Computer Science,
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