

Department of Mathematics, The University of Texas at Austin

### **Education**

**Carnegie Mellon University, Department of Mathematical Sciences** Ph.D. IN MATHEMATICS

August 2006

May 2002

Thesis advisors – Prof. S. E. Shreve and Prof. Kavita Ramanan

New York, New York

Pittsburgh, Pennsylvania

M.A. IN STATISTICS

Zagreb, Croatia

GRADUATE STUDENT

Mar 2000 – Aug 2001

**University of Zagreb, Faculty of Mathematics** 

University of Zagreb, Faculty of Mathematics

**Columbia University, Statistics Department** 

BACHELOR'S DEGREE IN MATHEMATICS

Zagreb, Croatia
December 1999

Thesis advisor – Prof. Z. Vondraček

Leipzig University, Naturwissenschaftlich-Theoretisches Zentrum

VISITING STUDENT

Leipzig, Germany

October 1998 - December 1998

# Employment\_\_\_\_\_

The University of Texas at Austin, Department of Mathematics

ASSOCIATE PROFESSOR OF PRACTICE

Austin, Texas

September 2021 – present

The University of Texas at Austin, Department of Mathematics

**ASSISTANT PROFESSOR OF PRACTICE** 

Austin, Texas

September 2018 – August 2021

The University of Texas at Austin, Department of Mathematics

**CLINICAL ASSISTANT PROFESSOR** 

Austin, Texas

September 2011 - August 2018

The University of Texas at Austin, Department of Mathematics

LECTURER

Austin, Texas

September 2006 – August 2011

## Teaching Experience \_\_\_\_\_

#### **Department of Mathematics, The University of Texas at Austin**

Austin, Texas

**ASSISTANT PROFESSOR OF PRACTICE** 

September 2018 - present

- Courses taught: Introduction to Financial Mathematics for Actuaries, Financial Mathematics for Actuarial Applications, Applied Statistics, Probability Models with Actuarial Applications, Theory of Interest
- Courses designed/re-designed: Introduction to Financial Mathematics for Actuaries, Financial Mathematics for Actuarial Applications
- Open Education Resources created: Introduction to Financial Mathematics for Actuaries

#### Department of Mathematics, The University of Texas at Austin

Austin, Texas

**CLINICAL ASSISTANT PROFESSOR** 

September 2011 - August 2018

- **Courses taught**: Introduction to Mathematical Statistics, Introduction to Financial Mathematics for Actuaries, Financial Mathematics for Actuarial Applications, Theory of Interest, Probability, Probability Models with Actuarial Applications, Stochastic Processes, Applied Statistics
- Courses designed/re-designed: Introduction to Financial Mathematics for Actuaries, Financial Mathematics for Actuarial Applications

#### Department of Mathematics, The University of Texas at Austin

Austin, Texas

**LECTURER** 

September 2006 - August 2011

- Courses taught: Differential Calculus, Actuarial Contingent Payments I and II, Financial Mathematics for Actuarial Applications, Theory of Interest, Probability, Probability Models with Actuarial Applications
- Courses designed: Financial Mathematics for Actuarial Applications

#### **Carnegie Mellon University, Department of Mathematical Sciences**

Pittsburgh, Pennsylvania

TEACHING ASSISTANT/INSTRUCTOR

January 2003 - September 2001

- Lead recitations: Concepts of Mathematics; Integration, Differential Equations, and Approximation
- Instructor: Concepts of Mathematics

#### **Columbia University, Statistics Department**

New York, New York

TEACHING ASSISTANT/INSTRUCTOR

August 2001 – December 2002

- Lead recitations: Introduction to Statistics; Statistical Inference
- Instructor: Introduction to Statistics

#### **University of Zagreb, Faculty of Mathematics**

Zagreb, Croatia

**TEACHING ASSISTANT** 

March 2000 – July 2001

• Lead recitations: Measure Theory; Introduction to Probability and Statistics

#### **University of Zagreb, Faculty of Mathematics**

Zagreb, Croatia

Undergraduate student

1995 – 2000

• Coach for the Croatian National team for International Mathematical Olympiads

## Honors and Awards \_\_\_\_\_

2022	The 'Instructor Learning Community Grant' Center for Teaching and Learning, UT Austin	Austin, TX
2022	The 'Faculty Innovation Grant' Center for Teaching and Learning, UT Austin	Austin, TX
2017	The 'John Durbin teaching award' Department of Mathematics, UT Austin	Austin, TX
2014, 2010	The 'Clock award' Services for Students with Disabilities, UT Austin	Austin, TX
2005	Best graduate student presentation award Department of Mathematical Sciences, CMU	Pittsburgh, PA
2003	Faculty fellowship for graduate study Carnegie Mellon University	Pittsburgh, PA
2001	Faculty fellowship for graduate study Columbia University	New York, NY
1998	DAAD Scholarship by the German Government Leipzig University	Leipzig, Germany
1997,1998	Best Student Award Faculty of Mathematics, University of Zagreb	Zagreb, Croatia
1998	Scholarship Local government, City of Zagreb	Zagreb, Croatia
1997	Scholarship Croatian Government	Zagreb, Croatia
1997	'Dean's Award' – awarded for the best original undergraduate paper University of Zagreb	Zagreb, Croatia
1994-1995	2 times member of the Croatian International Mathematical Olympiad team	Zagreb, Croatia
1990-1995	4 times Croatian mathematics champion, vice-champion once	Zagreb, Croatia

## Publications

• M. Čudina, K. Ramanan, Asymptotically Optimal Controls for Time-inhomogeneous Networks, SIAM Journal of Control and Optimization, Vol. 49, No.2, pp. 611-645

## Presentations \_\_\_\_\_

- 2nd Croatian Mathematical Congress (Zagreb, Croatia, June 2000)
- 13th Conference of the Applied Probability Society of INFORMS (Ottawa, July 2005)
- 14th Conference of the Applied Probability Society of INFORMS (Eindhoven, July 2007)

## Service\_\_\_\_\_

**Texas Higher Education Coordinating Board** 

REVIEWER Fall 2020

Faculty Advisory Committee

Services for Students with

Disabilities

MEMBER Fall 2020 - Spring 2021

Course advocate Department of Mathematics

M339D, M339W, M358K July 2020 - present

Instructional faculty review committee Department of Mathematics

MEMBER September 2016 - May 2020

Actuarial MA applications review committee Department of Mathematics

MEMBER September 2014 - present

Doctoral committee for Chengcheng LiuOperations ResearchMEMBERSummer 2017- Summer 2019

**Doctoral committee for E. Arda Sisbot**Operations Research

MEMBER Fall 2014- Summer 2015

Awards committee Department of Mathematics

MEMBER September 2012 - May 2017

Awards committee Department of Mathematics

CHAIR September 2013 - May 2014

Theory of Interest review committee Department of Mathematics

MEMBER September 2012 - May 2013

## Outreach\_

- Gave a talk on "Graphs, trees, and random walks" at the Saturday Morning Math Group, UT Austin
- Led the Math Club for first graders at Hill Elementary, Austin, TX
- Volunteered to prepare Kindergarteners for Math Pentathlon at Hill Elementary, Austin, TX