

# Milica Čudina

ASSISTANT PROFESSOR OF PRACTICE

Department of Mathematics, The University of Texas at Austin

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## Education

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

*Pittsburgh, Pennsylvania*

PH.D. IN MATHEMATICS

*August 2006*

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

**Columbia University, Statistics Department**

*New York, New York*

M.A. IN STATISTICS

*May 2002*

**University of Zagreb, Faculty of Mathematics**

*Zagreb, Croatia*

GRADUATE STUDENT

*Mar 2000 – Aug 2001*

**University of Zagreb, Faculty of Mathematics**

*Zagreb, Croatia*

BACHELOR'S DEGREE IN MATHEMATICS

*December 1999*

- Thesis advisor – Prof. Z. Vondraček

**Leipzig University, Naturwissenschaftlich-Theoretisches Zentrum**

*Leipzig, Germany*

VISITING STUDENT

*October 1998 - December 1998*

## Employment

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

*Austin, Texas*

ASSISTANT PROFESSOR OF PRACTICE

*September 2018 – present*

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

*Austin, Texas*

CLINICAL ASSISTANT PROFESSOR

*September 2011 – August 2018*

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

*Austin, Texas*

LECTURER

*September 2006 – August 2011*

## Teaching Experience

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**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

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

## Publications

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- **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

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- 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

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### Texas Higher Education Coordinating Board

REVIEWER

Fall 2020

### Faculty Advisory Committee

MEMBER

*Services for Students with  
Disabilities*

Fall 2020 - Spring 2021

### Course advocate

M339D, M339W, M358K

*Department of Mathematics*

July 2020 - present

### Instructional faculty review committee

MEMBER

*Department of Mathematics*

September 2016 - May 2020

### Actuarial MA applications review committee

MEMBER

*Department of Mathematics*

September 2014 - present

### Doctoral committee for Chengcheng Liu

MEMBER

*Operations Research*

Summer 2017- Summer 2019

### Doctoral committee for E. Arda Sisbot

MEMBER

*Operations Research*

Fall 2014- Summer 2015

### Awards committee

MEMBER

*Department of Mathematics*

September 2012 - May 2017

### Awards committee

CHAIR

*Department of Mathematics*

September 2013 - May 2014

### Theory of Interest review committee

MEMBER

*Department of Mathematics*

September 2012 - May 2013

## Outreach

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- 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