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# RAFAL GOEBEL

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## PERSONAL INFORMATION

email [goebel@math.washington.edu](mailto:goebel@math.washington.edu)

website [www.math.washington.edu/~goebel](http://www.math.washington.edu/~goebel)

nationality Polish

status in US Permanent Resident (Green Card)

## EDUCATION

### UNIVERSITIES ATTENDED:

89-92, 93-94 Maria Curie Sklodowska University, Lublin, Poland

92-93 Rutgers University, New Brunswick, NJ, USA

94-00 University of Washington, Seattle, WA, USA

### DEGREES:

M.Sc. 1994, Institute of Mathematics, University of Maria Curie-Sklodowska, Lublin, Poland (graduated with highest honors); thesis: *On the Stability of an  $L^2$ -angle*

Ph.D. 2000, Department of Mathematics, University of Washington, Seattle; advisor: R.T. Rockafellar, thesis: *Convexity, Convergence and Feedback in Optimal Control*

## RESEARCH INTERESTS

convex analysis, set-valued analysis, nonsmooth analysis

control, optimal control, duality in control

dynamical systems, hybrid systems, stability

optimization

## EMPLOYMENT

- 94-00 Teaching and Research Assistant at the Department of Mathematics, University of Washington
- summer 98 Researcher at the International Institute for Applied Systems Analysis, Vienna, Austria (Young Scientist Summer Program)
- 00-02 Post-Doctoral Fellow and Sessional Instructor at the Department of Mathematics, University of British Columbia and the Department of Mathematics, Simon Fraser University
- 02-04 Post-Doctoral Fellow at the Center for Control Engineering and Computation, Department of Electrical and Computer Engineering, University of California, Santa Barbara
- Aug 05-Jan 06 Part-Time Researcher at the Electrical and Computer Engineering, University of California, Santa Barbara
- Mar 05-Jun 07 Part-Time Lecturer at the Department of Mathematics, University of Washington

## TEACHING EXPERIENCE AND TRAINING

- 93-94 University of Maria Curie-Skłodowska: Teacher Education Program, including teaching elementary and high school mathematics classes
- 94-99 University of Washington, Teaching Assistant and Instructor  
experience includes: Teaching Assistant Training programs at Department of Mathematics and Center for Instructional Development and Research; Teaching Assistant for: calculus, upper level undergraduate and graduate optimization courses; Instructor for: Calculus I (differential calculus), Linear Optimization (senior level course); Tutor at Math Study Center
- 00-02 Simon Fraser University and University of British Columbia, Instructor  
experience includes: Introductory Mathematics for Social & Management Sciences, Integral Calculus, Ordinary Differential Equations
- Mar 05-Jun 07 University of Washington, Part-time Lecturer  
experience includes: Calculus II (integral calculus), Calculus III (Taylor polynomials, multivariable calculus), Nonlinear Optimization (senior level course)

## AWARDS AND HONORS

- 92-93 Ambassadorial Scholarship from Rotary International
- 93-94 Scholarship of the Polish Ministry of Education
- winter 00 McFarlan Fellowship, Department of Mathematics, University of Washington

## PROFESSIONAL ACTIVITIES

## SERVICE TO THE COMMUNITY:

- referee Automatica, IEEE Transactions on Automatic Control, SIAM Journal on Control and Optimization, Systems and Control Letters, SIAM Journal on Optimization
- reviewer Mathematical Reviews

## CONFERENCE PARTICIPATION (WITH PRESENTATION):

- 97 West Coast Optimization Meeting Seattle, WA;
- 98 Workshop on Variational Analysis and Related Topics, Davis, CA;
- 99 West Coast Optimization Meeting, Seattle, WA;
- 01 Fifth SIAM Conference on Control and its Applications, San Diego, CA;
- 02 West Coast Optimization Meeting, Seattle, WA;  
Forty First IEEE Conference on Decision and Control, Las Vegas, NV;
- 03 First Louisiana Conference on Mathematical Control Theory, Baton Rouge, LA;  
West Coast Optimization Meeting, Vancouver, Canada;
- 04 Eighth Southern California Nonlinear Control Workshop, Santa Barbara, CA;
- 05 American Control Conference, Portland, OR;
- 06 Forty Fifth IEEE Conference on Decision and Control, San Diego, CA –  
workshop on Robust Hybrid Systems: Theory and Applications;
- 07 West Coast Optimization Meeting, Seattle, WA

## RECENT SEMINAR PRESENTATION (AT UNIVERSITY OF WASHINGTON):

- 06 *Some self-dual operations on convex functions*, Optimization Seminar, Department of Mathematics  
*How set-valued mappings, generalized time domains, and “hybrid dynamical systems” come up in control engineering*, Rainwater Seminar, Department of Mathematics  
*Hermes and Krasovskii solutions to hybrid dynamical systems*, Optimization Seminar, Department of Mathematics