

# Giang Tran

Graduate Researcher, UCLA

Department of Mathematics  
University of California, Los Angeles

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## Research Interests

Computational Methods for PDEs, Image and Signal Processing, Medical Imaging, Inverse Problems, Scientific Computing, and Convex Optimization.

## Education

- Currently **Ph.D. Candidate in Mathematics**, *University of California, Los Angeles*.  
Advisor: Stanley Osher  
Thesis: Sparse-Inducing Methods in Imaging Sciences, Applied Harmonic Analysis, and PDEs.
- 2011 **M.A. in Mathematics**, *University of California, Los Angeles*.
- 2009 **M.S. in Mathematics**, *University of Strasbourg*, Strasbourg, France.
- 2006 **B.S. in Mathematics**, *Hanoi National University of Education*, Hanoi, Vietnam.

## Honors and Awards

- 2014–2015 Beckenbach Dissertation Year Fellowship Award, UCLA.
- 2014 SIAM Student Travel Award.
- 2009–2014 Vietnam Education Foundation Fellow, Vietnam.
- 2004, 2005 Odon Vallet Scholarship, Vietnam.

## Publications & Preprints

- **G. Tran**, H. Schaeffer, W. M. Feldman, and S. Osher. An  $L^1$  Penalty Method for General Obstacle Problems. *SIAM Journal on Applied Mathematics*, to appear.
- R. Caflisch, S. Osher, H. Schaeffer, and **G. Tran**. PDEs with Compressed Solutions. *Communications in Mathematical Sciences*, to appear.
- D. Zosso, **G. Tran**, and S. Osher. Non-local Retinex - A Unifying Framework and Beyond. *SIAM Journal on Imaging Sciences*, to appear.
- J. Gilles, **G. Tran**, and S. Osher. 2D Empirical Transforms. Wavelets, Ridgelets and Curvelets Revisited. *SIAM Journal on Imaging Sciences*, 7(1): 157–186, 2014.
- **G. Tran** and Y. Shi. Adaptively Constrained Convex Optimization for Accurate Fiber Orientation Estimation with High Order Spherical Harmonics. *MICCAI*, 485–492, 2013.
- D. Zosso, **G. Tran**, and S. Osher. A Unifying Retinex Model Based on Non-local Differential Operators. *S&T / SPIE Electronic Imaging: Computational Imaging XI, San Francisco, USA*, 2013.
- **G. Tran** and Y. Shi. Fiber Orientation and Compartment Parameter Estimation from Multi-Shell Diffusion Imaging. *Submitted to IEEE Transactions on Medical Imaging*, 2014.
- J.C. Thomas, J.J. Schwartz, J.N. Hohman, S.A. Claridge, H.S. Auluck, A.C. Serino, A.M. Spokoiny, **G. Tran**, K.F. Kelly, C.A. Mirkin, J. Gilles, S.J. Osher, and P.S. Weiss. Defect-Tolerant Aligned Dipoles within Two-Dimensional Plastic Lattices. *Submitted to ACS Nano*, 2015.
- L.J. Larsson, G. Morin, A. Begault, R. Chaine, J. Abiva, E. Hubert, M. Hurdal, M. Li, B. Paniagua, **G. Tran**, and M-P. Cani. Identifying Perceptually Salient Features on 2D Shapes. *Submitted to Research in Shape Analysis, Springer*, 2014.

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## Research Experience

### University of California, Los Angeles

2012–Present **Graduate Research Assistant.**

- Derived numerical solvers for partial differential equations using information science methods involving sparsity.
- Designed a new parameterless model for learning intrinsic features from images (Empirical Wavelet Transform).
- Proposed a unifying retinex model for image decomposition with applications in shadow detection, contrast enhancement, and nonuniform illumination correction.

2010–2012 **Graduate Teaching Assistant.**

- Conducted weekly discussion sections for 30 students in 5 math courses and an intermediate C++ programming class.
- Responsible for grading exams, holding office hours, and running general help sessions.

### Collaborative Projects

2014–Present **California NanoSystem Institute (CNSI).**

- Created a novel image analysis method to detect changes in dipole alignment based on a local maxima and block-matching algorithm, which allows the discovery of the self-assembly of carboranethiol monolayers.

2012–2013 **Laboratory of Neuro Imaging (LONI).**

- Developed a new method for the analysis of HARDI and multishell diffusion imaging data for fiber orientation distribution reconstruction by solving an adaptively constrained optimization problem.

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## Talks

Mar. 2015 SIAM Conference on Computational Science and Engineering, Salt Lake City, Utah.

Aug. 2014 ICES Seminar, University of Texas, Austin.

Jun. 2014 Level Set Collective, University of California, Los Angeles.

Aug. 2013 Women in Shape Modeling (WiSH) Workshop, IPAM, University of California, Los Angeles.

Mar. 2013 Graduate Student Outreach Seminar, University of California, Los Angeles.

Jul. 2012 Level Set Collective, University of California, Los Angeles.

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## Teaching Experience

2010–2012 & **Graduate Teaching Assistant**, *University of California, Los Angeles.*

- Summer 2014
- PIC 10B, Intermediate Programming
  - Math 33A, Linear Algebra and Applications
  - Math 33B, Differential Equations
  - Math 32A, Calculus of Several Variables
  - Math 31A, Differential and Integral Calculus
  - Math 3A, Calculus for Life Sciences Students

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## Service and Academic Outreach

- Reviewed articles for: *SIAM Multiscale Modeling and Simulation*, *IEEE Transactions on Image Processing*, *Science Direct Computer and Geosciences*.
- UCLA Department of Mathematics First Year Graduate Mentor, 2014–Present
- UCLA Alumni Day Mathematics Outreach, Spring 2014

## CURRICULUM VITAE

### • PERSONAL INFORMATION

Family name, First name: Bijleveld, Catrien

Date of birth: [REDACTED]

Nationality: The Netherlands

### • EDUCATION

- 2002            Master of Law, *cum laude*  
Faculty of Law, Leiden University, The Netherlands
- 1989            PhD in Psychology  
Faculty of Social Sciences, Leiden University, The Netherlands  
PhD Supervisors: prof. Jan de Leeuw, prof. Willem J. Heiser
- 1986            Master in Methods and Techniques of Social Science Research, *cum laude*  
Faculty of Social Sciences, Leiden University, The Netherlands

### • CURRENT POSITION(S)

- 2014 –            Director  
Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), The Netherlands
- 2003 –            Professor of Research Methods in Criminology, Department of Criminal Law and Criminology, Vrije  
Universiteit Amsterdam
- 2010 –            Academy Member  
Royal Dutch Academy of Science (KNAW), The Netherlands

### • PREVIOUS POSITIONS (LAST THREE)

- 2001 – 2014      Senior Researcher  
Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), The Netherlands
- 1997 – 2000      Program Coordinator  
Wetenschappelijk Onderzoek- en Documentatiecentrum (WODC), The Netherlands
- 1990 – 1997      Assistant Professor (universitair docent)  
Faculty of Psychology, Leiden University, The Netherlands

### • 5 KEY PUBLICATIONS (ALL PEER-REVIEWED)

1. MESTERS, G., VAN DER GEEST, V., & **BIJLEVELD**, C. (2016). Crime, Employment and Social Welfare: An Individual-Level Study on Disadvantaged Males. [journal article]. *Journal of Quantitative Criminology*, 32(2), 159–190.
2. VAN DER GEEST, V.R., **BIJLEVELD**, C.C.J.H., & BLOKLAND, A.A.J. (2011). The Effects of Employment on Longitudinal Trajectories of Offending: A Follow-Up of High-Risk Youth From 18 to 32 Years of Age. *CRIMINOLOGY*, 49(4), 1195–1234.
3. BESEMER, S., VAN DER GEEST, V., MURRAY, J., **BIJLEVELD**, C. C. J. H., & FARRINGTON, D. P. (2011). The Relationship Between Parental Imprisonment and Offspring Offending in England and The Netherlands. *BRITISH JOURNAL OF CRIMINOLOGY*, 51(2), 413–437.
4. **BIJLEVELD**, C.C.J.H., & WIJLMAN, M. (2009). Intergenerational continuity in convictions: A five-generation study. *CRIMINAL BEHAVIOUR AND MENTAL HEALTH*, 19(2), 142–155.
5. VAN DER GEEST, V.R., BLOKLAND, A.A.J., & **BIJLEVELD**, C.C.J.H. (2009). Delinquent Development in a Sample of High-Risk Youth: Shape, Content, and Predictors of Delinquent Trajectories from Age 12 to 32. *JOURNAL OF RESEARCH IN CRIME AND DELINQUENCY*, 46(2), 111–143.

## CURRICULUM VITAE

### • PERSONAL INFORMATION

Family name, First name: Vandeviver, Christophe

Researcher unique identifier(s): ORCID iD [REDACTED]

Date of birth: [REDACTED]

Nationality: Belgian

### • EDUCATION

- 2015 PhD in Criminology (no degrees awarded)  
Faculty of Law, Ghent University, Belgium  
PhD Supervisors: prof. dr. Tom Vander Beken & dr. Stijn Van Daele
- 2015 Doctoral Training (no degrees awarded)  
Doctoral Schools of Arts, Humanities and Law, Ghent University, Belgium
- 2011 Master of Science in Quantitative Analysis in the Social Sciences, *with greatest distinction*  
Faculty of Political and Social Sciences, HUB-KUBrussel, Belgium
- 2010 Master in Criminology, *with great distinction*  
Faculty of Law, Ghent University, Belgium
- 2009 Bachelor in Criminology, *with distinction*  
Faculty of Law, Ghent University, Belgium

### • CURRENT POSITION(S)

- 2015 – Postdoctoral Research Fellow of the Research Foundation – Flanders (FWO)  
Faculty of Law, Ghent University, Belgium
- 2015 – Visiting Research Fellow  
Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), the Netherlands

### • PREVIOUS POSITIONS

- 2015 – 2015 Postdoctoral Researcher  
Faculty of Law, Ghent University, Belgium
- 2011 – 2015 Doctoral Fellow of Ghent University Research Fund (BOF)  
Faculty of Law, Ghent University, Belgium
- 2011 – 2011 Junior Researcher  
Faculty of Law, Ghent University, Belgium

### • 5 KEY PUBLICATIONS (ALL PEER-REVIEWED)

1. **VANDEVIVER, C.**, NEUTENS, T., VAN DAELE, S., GEURTS, D. & VANDER BEKEN, T. (2015). Modeling residential burglars' target selection process at the house-level. *APPLIED GEOGRAPHY*, 64, 24–34
2. **VANDEVIVER, C.**, VAN DAELE, S., & VANDER BEKEN, T. (2015). What makes long crime trips worth undertaking? Balancing costs and benefits in burglars' journey to crime. *BRITISH JOURNAL OF CRIMINOLOGY*, 55(2), 399–420.
3. **VANDEVIVER, C.** (2014). Applying Google Maps and Google Street View in environmental criminological research. *CRIME SCIENCE*, 3(13), 1–16.
4. MISSINNE, S., **VANDEVIVER, C.**, VAN DE VELDE, S., & BRACKE, P. (2014). Measurement equivalence of the CESD-8 depression scale among ageing populations in 11 European countries. *SOCIAL SCIENCE RESEARCH*, 46, 38–47.
5. STAMATAKIS, N., & **VANDEVIVER, C.** (2013). Restorative justice in Belgian prisons: the results of an empirical research. *CRIME LAW AND SOCIAL CHANGE*, 59(1), 79–111.

## CURRICULUM VITAE

### • PERSONAL INFORMATION

Family name, First name: Bernasco, Wim

Researcher unique identifier(s): ORCID iD [REDACTED]

Date of birth: [REDACTED]

Nationality: The Netherlands

### • EDUCATION

- 1994            PhD in Sociology  
                  Utrecht University, The Netherlands  
                  PhD Supervisors: prof. dr. Reinhard Wippler, prof. dr. Wout Ultee, prof. dr. Paul de Graaf
- 1987            MSc Psychology (cum laude)  
                  Leiden University, The Netherlands
- 1983            BSc in Psychology (with honor)  
                  Leiden University, The Netherlands

### • CURRENT POSITIONS

- 2013 –            Full professor (Chair: Spatial Analysis of Crime)  
                  Department of Spatial Economics, Vrije Universiteit Amsterdam, The Netherlands
- 2005 –            Senior researcher  
                  Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), The Netherlands

### • PREVIOUS POSITIONS (LAST THREE)

- 2000 – 2005     Researcher  
                  Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), The Netherlands
- 1999 – 2000     Researcher  
                  Research and Documentation centre (WODC) Ministry of Justice, The Netherlands
- 1998 – 1999     Assistant professor  
                  Department of Psychology, Leiden University, The Netherlands

### • 5 KEY PUBLICATIONS (ALL PEER-REVIEWED)

1. LAMMERS, M., MENTING, B., RUITER, S. & **BERNASCO**, W. (2015). Biting Once, Twice: The Influence of Prior on Current Crime Location Choice. *CRIMINOLOGY*, 53, 309–329
2. **BERNASCO**, W., RUITER, S., BRUINSMA, G., PAUWELS, L. & WEERMAN, F. (2013). Situational Causes of Offending: A Fixed Effects Analysis of Space-Time Budget Data. *CRIMINOLOGY*, 51, 895–926.
3. **BERNASCO**, W., BLOCK, R. & RUITER, S. (2013). Go Where the Money is: Modeling Street Robbers' Location Choices. *JOURNAL OF ECONOMIC GEOGRAPHY*, 13, 119–143.
4. **BERNASCO**, W. & BLOCK, R.. (2009). Where Offenders Choose To Attack ; A Discrete Choice Model of Robberies in Chicago. *CRIMINOLOGY*, 47, 93–130
5. JOHNSON, S.D. , **BERNASCO**, W., BOWERS, K.J., ELFFERS, H., RATCLIFFE, J., RENGERT, G.F., & TOWNSLEY, M. (2007). Space–Time Patterns of Risk: A Cross National Assessment of Residential Burglary Victimization. *JOURNAL OF QUANTITATIVE CRIMINOLOGY*, 23, 201–219