

PERSONAL INFORMATION:

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Department Address: Department of Computer Science
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EDUCATION:

PhD, Computer Science, University of California, Davis.

[\[http://www.cs.ucdavis.edu\]](http://www.cs.ucdavis.edu)

MSc, Computer Science, University of British Columbia, June 2004.

[\[http://www.cs.ubc.ca\]](http://www.cs.ubc.ca)

BSc, Computer Engineering, Ege University, June 1999.

[\[http://bilmuh.ege.edu.tr\]](http://bilmuh.ege.edu.tr)

RESEARCH INTERESTS:

GPU Computing [Multitasking Real-Time Embedded Tasks, Automotive Computing, Computer Vision, Medical Imaging, Deformable Registration]

Artificial Intelligence [Robotics, Controller Design, Situated Agents, Machine Learning, Sampling Methods]

PUBLICATIONS:

Feature-Based Speed Limit Sign Detection Using a Graphics Processing Unit, Vladimir Glavtchev, Pinar Muyan-Ozcelik, Jeffrey M. Ota, John D. Owens, To appear in IEEE Intelligent Vehicles Symposium, 2011, Baden-Baden, Germany.

[\[http://www.idav.ucdavis.edu/~pmuyan/publications/IV-2011-Feature-Based_Speed_Limit_Sign.pdf\]](http://www.idav.ucdavis.edu/~pmuyan/publications/IV-2011-Feature-Based_Speed_Limit_Sign.pdf)

Real-Time Speed-Limit-Sign Recognition on an Embedded System Using a GPU, Pinar Muyan-Ozcelik, Vladimir Glavtchev, Jeffrey M. Ota, John D. Owens, GPU Computing Gems, ed. Wen-mei W. Hwu , 2011, Morgan Kaufmann.

[\[http://mkp.com/gpu-computing-gems\]](http://mkp.com/gpu-computing-gems)

A Template-Based Approach for Real-Time Speed-Limit-Sign Recognition on an Embedded System Using GPU Computing, Pinar Muyan-Ozcelik, Vladimir Glavtchev, Jeffrey M. Ota, John D. Owens, *The German Association for Pattern Recognition (DAGM) Symposium*, 2010, Darmstadt, Germany.

[\[http://www.idav.ucdavis.edu/~pmuyan/publications/DAGM-2010-A_Template-Based_Approach.pdf\]](http://www.idav.ucdavis.edu/~pmuyan/publications/DAGM-2010-A_Template-Based_Approach.pdf)

High performance computing for deformable image registration: Towards a new paradigm in adaptive radiotherapy, Sanjiv S. Samant, Junyi Xia, Pinar Muyan-Ozcelik, and John D. Owens, *Medical Physics*, August 2008, 35(8):3546–3553.

[\[http://scitation.aip.org/medphys/\]](http://scitation.aip.org/medphys/)

Fast Deformable Registration on the GPU: A CUDA Implementation of Demons, Pinar Muyan-Ozcelik, John D. Owens, Junyi Xia, Sanjiv S. Samant. *Technical session on UnConventional High Performance Computing (UCHPC) in conjunction with International Conference on Computational Science and Its Applications (ICCSA)*, 2008, Perugia, Italy.

[\[http://www.idav.ucdavis.edu/~pmuyan/publications/ICSSA-2008-Fast_Deformable_Registration.pdf\]](http://www.idav.ucdavis.edu/~pmuyan/publications/ICSSA-2008-Fast_Deformable_Registration.pdf)

Situated Robot Design with Prioritized Constraints, Pinar Muyan-Ozcelik and Alan K. Mackworth, *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2004, Sendai, Japan.

[\[http://www.idav.ucdavis.edu/~pmuyan/publications/IROS-2004-Situated_Robot_Design.pdf\]](http://www.idav.ucdavis.edu/~pmuyan/publications/IROS-2004-Situated_Robot_Design.pdf)

Prioritized Constraints in the Design of a Situated Robot, Pinar Muyan-Ozcelik, *MSc Thesis: Dept. of Computer Science, University of British Columbia*, 2004, Vancouver, Canada.

[\[http://www.idav.ucdavis.edu/~pmuyan/publications/MSc_Thesis-2004-Prioritized_Constraints.pdf\]](http://www.idav.ucdavis.edu/~pmuyan/publications/MSc_Thesis-2004-Prioritized_Constraints.pdf)

A Blessing of Dimensionality: Measure Concentration and Probabilistic Inference, Pinar Muyan and Nando de Freitas, *International Workshop on Artificial Intelligence and Statistics (AI-STATS)*, 2003, Key West, FL, USA.

[\[http://www.idav.ucdavis.edu/~pmuyan/publications/AI_STATS-2003-Blessing_of_Dimensionality.pdf\]](http://www.idav.ucdavis.edu/~pmuyan/publications/AI_STATS-2003-Blessing_of_Dimensionality.pdf)

PRESENTATIONS:

Feature-based Speed Limit Sign Detection using a Graphics Processing Unit, Talk will be given [by Vladimir Glavtchev] at IEEE Intelligent Vehicles Symposium, Baden-Baden, Germany, June 6, 2011.

Deformable Registration Using GPU Computing, Talk given at Radiation Oncology Department, UC Davis Medical Center, Sacramento, CA, April 19, 2011.

A Template-Based Approach for Real-Time Speed-Limit-Sign Recognition on an Embedded System Using GPU Computing, Poster presentation at *The German Association for Pattern Recognition (DAGM) Symposium*, Darmstadt, Germany, September 23, 2010.

Driver Assistance: Speed-Limit Sign Recognition on the GPU, Poster presentation [by Vladimir Glavtchev] at *GPU Technology Conference (GTC)*, San Jose, CA, September 21, 2010.

A GPU Approach to Speed Limit Sign Recognition, Talk given [with John D. Owens, Vladimir Glavtchev, and Jeffrey M. Ota] at *GPU Technology Conference (GTC)*, San Jose, CA, October 2, 2009.

Speed-limit Sign Recognition with GPU Computing, Poster presentation [with Vladimir Glavtchev] at *GPU*

Technology Conference (GTC), San Jose, CA, October 1, 2009.

GPU Computing in Tomorrow's Automobiles, Talk given [with Vladimir Glavtchev] at *nVision*, San Jose, CA, August 27, 2008.

Fast Deformable Registration on the GPU: A CUDA Implementation of Demons, Talk given at *International Conference on Computational Science and Its Applications (ICCSA)*, Perugia, Italy, July 1, 2008. [presented in the technical session on UnConventional High Performance Computing (UCHPC)].

GPGPU in Medical Imaging: Demons Registration with CUDA, Talk given at *Eigen*, Grass Valley, CA, October 26, 2007.

Situated Robot Design with Prioritized Constraints, Talk given at *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Sendai, Japan, October 1, 2004.

Prioritized Constraints in the Design of a Situated Robot, MSc exit seminar at *University of British Columbia (UBC), Laboratory for Computational Intelligence (LCI)*, Vancouver, Canada, May 21, 2004.

Constraint-based Design of Ainia, a Robotic Kicker, Poster presentation at *13th Annual Canadian Conference on Intelligent System (IS2003)*, Halifax, Canada, June 8-10, 2003.

TEACHING:

2001-2004:

Graduate Teaching Assistant,
University of British Columbia, Dept. of Computer Science
[<http://www.cs.ubc.ca>]

HONORS AND AWARDS:

NVIDIA Graduate Fellowship, 2011-2012.
[<http://research.nvidia.com/relevant/graduate-fellowship-program>]

Google Anita Borg Scholarship Finalist, 2009.
[<http://www.google.com/anitaborg>]

UC Davis Fee Fellowship recipient, 2005-2007.
[<http://www.cs.ucdavis.edu>]

Precarn Graduate Student Scholarship recipient, 2002-2003.
[<http://www.precarn.ca>]

St. John's College member, 2000-2004.
[<http://www.stjohns.ubc.ca>]

AIESEC exchange student, 1997-1998 and 1999-2000.
[\[http://www.aiesec.org\]](http://www.aiesec.org)