

Research Interests

- ◊ Geometry processing, shape understanding, 3D deep learning, and generative methods
- ◊ Inverse and forward procedural modeling approaches for urban modeling and 3D reconstruction
- ◊ Deep learning models for satellite images, street-level imagery, and human behavior in virtual reality

Academic

University of California, Los Angeles (UCLA), CA, USA	
Visiting Scholar, Institute for Pure & Applied Mathematics	2019
Purdue University, West Lafayette, IN, USA	
Ph.D., Computer Science (Advisor: Daniel Aliaga)	2010 - 2016
M.Sc., Computer Science	
Middle East Technical University, Ankara, Turkey	
B.Sc., Computer Engineering (high honor student)	2006 - 2010
Minor in Electrics and Electronics Engineering	2007 - 2010
Ankara Atatürk Anatolian High School, Ankara, Turkey (Graduation: 5.00/5.00)	2003 - 2006

Work Experience

Intel - Senior Staff Research Scientist	March 2020 - ...
◊ Conducting research on the world's largest volumetric capture studio.	
◊ DL and 3D vision for 3D reconstruction, shape understanding, and face/body capture.	
DeepScale - Staff Research Scientist	Jan 2019 - Dec 2019
◊ Exploring deep temporal models for street-level video segmentation and similar tasks.	
◊ Developing a deep fake detector using biological signals.	
Facebook - Oculus/AML - Postdoctoral Research Scientist (Advisor: Ramesh Raskar)	Dec 2016 - Dec 2018
◊ User comfort and behavior analysis for varifocal headsets and machine learning in VR.	
◊ 3D reconstruction and deep learning approaches for satellite image understanding.	
◊ Extracting maps and urban information using neural networks and computer vision.	
Dept. of Computer Science, Purdue University - Graduate Research Assistant	Jan 2011 - Dec 2016
◊ Inverse procedural modeling of urban models, computational geometry for proceduralization and fabrication, UrbanVision Project, 3D urban reconstruction and modeling.	
PIXAR Animation Studios - Infrastructure Software Engineering Intern	June 2015 - Jan 2016
◊ Maintaining the integrity of studio, implementing new features, developing a build system.	
Dept. of Computer Engineering, METU - Student System Administrator	Jan 2008 - June 2010
◊ Responsible for software and hardware maintenance of labs, system consistency and fixing network problems. (UNIX and Windows systems)	
Dept. of Computer Engineering, METU - Student Teaching Assistant	Sept 2007 - Jan 2008
◊ Responsible for labs, exams, and assignments for CEng230 - Introduction to C Programming.	
Havelsan Inc. - Software House of Turkey - Software Engineering Intern	July - Sept 2009
◊ Joint Task Force Simulation: Developing i18n and logging tools, working as test engineer.	
◊ Artillery Forward Observer Simulator: Design and implementation of GUI and controllers.	
KOVAN Research Lab, METU - Robotics Lab - Research Intern	June - Sept 2008
◊ Braitenberg's Vehicles Simulator and Rossi Project: Working on iCub configuration files.	
Kapadokya Software - Author and Editor	Dec 2007 - April 2008
◊ Pardus Educator's Handbook: Writing/editing the book that trains educators of Pardus.	

Awards & Honours

Best paper for Jack Dangermond Award,	ISPRS	2019
Industry Distinguished Lecturer,	IEEE GRSS	2019
F8 Scholarship,	Facebook	2017, 2019
Visiting Scholar,	IPAM - UCLA	2018
CMW Travel Grant,	CRA-W	2018

Best Paper Award,	<i>CVPR - EarthVision Workshop</i>	2017
Spring Travel Grant,	<i>Purdue WISP - College of Science</i>	2017
Grace Hopper Celebration Travel Grant,	<i>Purdue Computer Science Dept.</i>	2012 - 2014, 2016
Google I/O Travel Award,	<i>Anita Borg Institute</i>	2015, 2016
Women in Shape Workshop Travel Funding,	<i>AWM - NSF</i>	2016
Travel Award,	<i>CVPR - WiCV</i>	2016
Bilsland Dissertation Fellowship,	<i>Purdue Graduate School</i>	2016
CSESC '16 Best Poster Award,	<i>Purdue SIAM</i>	2016
Doctoral Consortium Travel Award,	<i>ICCV</i>	2015
Project Tango Build-An-App Contest Best Proposal,	<i>Google</i>	2015
GHC Scholarship for Grace Hopper Celebration,	<i>Anita Borg Institute</i>	2015
Global Ambassador Recruitment Travel Grant,	<i>Purdue Graduate Admissions</i>	2014
CRA-W Grad Cohort Travel Scholarship,	<i>CRA-W</i>	2011, 2014
Best Reviewer Award,	<i>3rd Computer Science Student Workshop</i>	2012
Admission to several MSc and PhD programs,	<i>Penn State, McGill, TU/E, UF...</i>	2010
Best Compiler Award,	<i>7th Traditional Compiler Contest, METU</i>	2010
Dean's High Honor (7 terms), Honor Roll (1 term),	<i>METU</i>	2006 - 2010
Finalist,	<i>"Innovation Tour 2007" project competition</i>	2007
Ranked 1265 th among 1.8 million participants,	<i>University Entrance Exam (OSS)</i>	2006
METU Physics Contest Student,	<i>AAAL</i>	2006
High School Representative,	<i>TUBITAK National Olympiads - Math & CS2004 - 2006</i>	
Ranking 1 st place among the province,	<i>MEB Level Determination Exam</i>	2003
Bronze medal,	<i>TUBITAK National Olympiads in Math</i>	2003

Journal Publications

- ◇ Umur A. Ciftci, **İlke Demir**, and Lijun Yin. 2020. FakeCatcher: Detection of Synthetic Portrait Videos using Biological Signals. *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*.
- ◇ **İlke Demir** and Daniel G. Aliaga. 2018. Guided Proceduralization: Optimizing Geometry Processing and Grammar Extraction for Architectural Models. *Computers & Graphics*. Volume 74, pages 257-267.
- ◇ **İlke Demir**, Daniel G. Aliaga, Bedrich Benes. 2018. Near-Convex Decomposition and Layering for Efficient 3D Printing. *Additive Manufacturing*. Volume 21, pages 383-394.
- ◇ **İlke Demir**, Forest Hughes, Aman Raj, Kaunil Dhruv, Suryanarayana M. Muddala, Sanyam Garg, Barrett Doo, and Ramesh Raskar. 2018. Generative Street Addresses from Satellite Imagery. *ISPRS International Journal of Geo-Information (IJGI)*. Volume 7(3), Article 84, 22 pages.
- ◇ **İlke Demir**. 2017. A Generalized Proceduralization Framework for Urban Models with Applications in Procedural Modeling, Synthesis, and Reconstruction. *Doctoral dissertation*. Purdue University, West Lafayette, IN.
- ◇ Daniel G. Aliaga, **İlke Demir**, Bedrich Benes, and Michael Wand. 2016. Inverse Procedural Modeling of 3D Models for Virtual Worlds. In *ACM SIGGRAPH 2016 Courses (SIGGRAPH '16)*. Article 16, 316 pages.
- ◇ **İlke Demir**, Daniel G. Aliaga, and Bedrich Benes. 2015. Coupled Segmentation and Similarity Detection for Architectural Models. *ACM Trans. Graph. (ToG)*, also on *SIGGRAPH '15*. Volume 34 (4), Article 104, 11 pages.
- ◇ Ignacio Garcia-Dorado, **İlke Demir**, and Daniel G Aliaga. 2013. Automatic Urban Modeling using Volumetric Reconstruction with Surface Graph Cuts. *Computers & Graphics*. Volume 37(7), pages 896-910.

Conference Publications

- ◇ Umur A. Ciftci, **İlke Demir**, and Lijun Yin. 2020. How do the Hearts of Deep Fakes Beat? Deep Fake Source Detection via Interpreting Residuals using Biological Signals. *IEEE Intl. Joint Conference on Biometrics (IJCB)*.
- ◇ David Chu, **İlke Demir**, Kristen Eichensehr, Jacob G. Foster, Mark L. Green, Kristina Lerman, Filippo Menczer, Cailin O'Connor, Edward Parson, Lars Ruthotto, Amit Sahai, Jose Sotelo, Luca Venturi. 2020. Deep Fakery – An Action Plan (White Paper). *UCLA - IPAM*.
- ◇ **İlke Demir**, Camilla Hahn, Kathryn Leonard, Geraldine Morin, Dana Rahbani, Athina Panotopoulou, Amelie Fondevilla, Elena Balashova, Bastien Durix, Adam Kortylewski. 2019. SkelNetOn 2019 Dataset and Challenge on Deep Learning for Geometric Shape Understanding. *IEEE Intl. Conf. on Comp. Vision and Pattern Recognition (CVPR) Workshops*. Long Beach, CA, 2019.
- ◇ **İlke Demir**, Guan Pang, and Jing Huang. 2019. A Computer Vision Perspective on Analyzing and Synthesizing Geospatial Data. *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*.

- ◇ Pradeep Kr. Banerjee, Sumukh Bansal, **İlke Demir**, Minh Ha Quang, Lin Huang, Ruben Hhnerbein, Oleg James, Scott C. Kachan, Louis Ly, Ola Marius Lysaker, Samee Maharjan, Anton Mallasto, Guido Montfar, Kai Sandfort, Stefan C. Schonscheck, Pablo Surez-Serrato, Katarna Tthov, Yuguang Wang, Jia Le Xian, Rui Xiang, Hongkai Zhao. Geometry and Learning from Data in 3D and Beyond (White Paper). *UCLA - IPAM Long Program, Spring 2019*.
- ◇ **İlke Demir** and Ramesh Raskar. 2018. Addressing the Invisible: Street Address Generation for Developing Countries with Deep Learning. *Thirty-second Conference on Neural Information Processing Systems (NeurIPS) Workshop Proceedings, Machine Learning for the Developing World*. Dec 2018.
- ◇ **İlke Demir**, Krzysztof Koperski, David Lindenbaum, Guan Pang, Jing Huang, Saikat Basu, Forest Hughes, Devis Tuia, and Ramesh Raskar. 2018. DeepGlobe 2018: A Challenge to Parse the Earth through Satellite Images. *IEEE Intl. Conf. on Comp. Vision and Pattern Recognition (CVPR) Workshops*. Salt Lake City, UT, 2018, pp. 1-8.
- ◇ **İlke Demir**, Dena Bazazian, Adriana Romero, Viktoriia Sharmanska, and Lyne P. Tchampi. 2018. WiCV 2018: The Fourth Women In Computer Vision Workshop. *IEEE Intl. Conf. on Comp. Vision and Pattern Recognition (CVPR) Workshops*. Salt Lake City, UT, 2018, pp. 1860-1862.
- ◇ **İlke Demir**. 2018. A Holistic Framework for Addressing the World using Machine Learning. *IEEE Intl. Conf. on Comp. Vision & Pattern Recognition (CVPR) Workshops*. Salt Lake City, UT, 2018, pp. 16-19.
- ◇ **İlke Demir**. 2017. Inverse Procedural Modeling for 3D Urban Models. *Grace Hopper Celebration of Women in Computing Conference (GHC '17)*. Orlando, FL, USA. (peer-reviewed oral presentation)
- ◇ **İlke Demir**, Forest Hughes, Aman Raj, Kleovoulos Tsourides, Divyaa Ravichandran, Suryanarayana Murthy, Kaunil Dhruv, Sanyam Garg, Jatin Malhotra, Barrett Doo, Grace Kermani, and Ramesh Raskar. 2017. Robocodes Towards Generative Street Addresses from Satellite Imagery. *IEEE Intl. Conf. on Comp. Vision and Pattern Recognition (CVPR) Workshops*. Honolulu, HI, 2017, pp. 1486-1495.
- ◇ **İlke Demir**. 2017. On Generalized Proceduralization Approaches for Urban Data. *IEEE Intl. Conf. on Comp. Vision and Pattern Recognition (CVPR), Women in Comp. Vision Workshop (WiCV '17)*.
- ◇ **İlke Demir**, Daniel G. Aliaga, and Bedrich Benes. Proceduralization of Urban Models. *25th IEEE International Conference on Signal Processing and Applications (SIU '17)*. Antalya, Turkey, pp. 1-4.
- ◇ **İlke Demir**, Daniel G. Aliaga, and Bedrich Benes. 2016. Proceduralization for Editing 3D Architecture. In *Proc. of the 2016 International Conference on 3D Vision (3DV '16)*. Stanford, CA, 2016, pp. 194-202.
- ◇ **İlke Demir**, Daniel G. Aliaga, and Bedrich Benes. 2016. Procedural Editing of 3D Building Point Clouds. *IEEE Intl. Conf. on Comp. Vision and Pattern Recognition (CVPR), Women in Comp. Vision Workshop (WiCV '16)*.
- ◇ **İlke Demir**, Daniel G. Aliaga, and Bedrich Benes. 2015. Procedural Editing of 3D Building Point Clouds. In *Proceedings of the 2015 IEEE International Conference on Computer Vision (ICCV) (ICCV '15)*. 2147-2155.
- ◇ **İlke Demir**. 2015. Proceduralization of Urban Models. 2015. *Grace Hopper Celebration of Women in Computing Conference (GHC '15)*. Houston, TX, USA. (peer-reviewed oral presentation)
- ◇ **İlke Demir**, Daniel G. Aliaga, and Bedrich Benes. 2014. Proceduralization of Buildings at City Scale. In *Proc. of the 2014 International Conference on 3D Vision (3DV '14)*, Vol. 1., 456-463.

Selected Projects

- 3D Shape Analysis, GL2019 - IPAM, UCLA** 2019 - ...
 - ◇ Research on novel architectures, kernels, and loss functions on 3D deep learning for shape analysis.
- Machine Learning for VR, Oculus - Facebook, Inc.** 2018 - ...
 - ◇ Analysis of various tracking data in VR, developing deep learning models for immersive experiences.
- 3D Deep Learning for Shape Abstraction, WiSH3 (multiple collaborations)** 2018 - ...
 - ◇ Evaluation of 3D representations for learning topological and geometric shape understanding.
- DeepGlobe, Applied Machine Learning (AML) - Facebook, Inc.** 2017 - ...
 - ◇ Geometric and semantic information extraction from satellite images using deep neural networks.
- Robocodes, Facebook, Inc.** 2016 - 2017
 - ◇ Generative schemes for mimicing human settlements, using ML/CV on satellite images.
- Geometry Processing, CGVLab, CS, Purdue University** 2013 - 2018
 - ◇ Automatic segmentation and labeling algorithms for proceduralization and computational fabrication.
 - ◇ Several optimization approaches for efficient and constrained decomposition.
- Proceduralization / Inverse Procedural Modeling, CGVLab, CS, Purdue University** 2012 - 2018
 - ◇ An automatic framework to generate grammars from various types of 3D urban models, prototyping an interactive system; for editing, completion, style transfer, and structure preservation.
 - ◇ Compression and theoretical minimal descriptor search for proceduralization systems.

UrbanVision , <i>CGVLab, CS, Purdue University, in coordination with UC Berkeley</i>	2011- 2012
<ul style="list-style-type: none"> ◊ A software-based simulation system for planning and analysis of urban development at scale. ◊ Complete 3D dynamic city models including procedural buildings, vegetation, traffic, pedestrians, and other urban details, also explorable on a multi-touch gesture interface. 	
3D Construction Quality Analyzer , <i>IdeaLab, CGT, Purdue University</i>	Oct. 2010
◊ An interdisciplinary project using computer vision in automation of construction management.	- May 2011
TRASTRAPS , <i>Final Design Project at METU in coordination with ASELSAN Inc.</i>	Sept 2009
◊ An HLA-Based Warfare Simulator with both 2D and 3D graphics, battlefield configuration, intelligent agents, sound effects, and first person, map navigation and replay modes.	- June 2010
3D Farmville World , <i>Computer Graphics Course Project</i>	Fall 2009
◊ Creating 3D version of Farmville, with less functionality but better graphics and object rendering.	
Compiler for Cb , <i>Award Winning Language Processors Course Project</i>	Fall 2009
◊ Writing lexer, parser, beautifier, tree constructor and assembly generator of a C-like language.	
Braitenberg's Vehicles Simulator , <i>KOVAN Research Lab, METU</i>	Summer 2008
◊ Implementing behavioral robot models introduced by Valentino Braitenberg with all functionality, new species, and interface to design new behaviors.	
Contribution to Pardus , <i>Linux Working Group, METU</i>	2007-2008
◊ Packaging, coding and patching of some applications to Pardus, a linux distro founded by Tubitak.	
CENGi - Wireless Internet Access Interface , <i>CEng, METU</i>	Fall 2007
◊ Design and implementation of department's wireless access user interface.	

Service Experience

Organizing Committee	<i>Eye Tracking for VR & AR Workshop - ICCV</i>	2019
Workshop Chair	<i>Deep Learning for Geometric Shape Understanding - CVPR</i>	2019, 2020
Research Network Committee	<i>WiSH - Association for Women in Mathematics</i>	2019
Organizing Committee	<i>SUMO Challenge - CVPR</i>	2019
Organizing Committee	<i>EarthVision - CVPR</i>	2019, 2020
Co-editor	<i>Learning & Optimization Methods for Shape Abstractions - Springer</i>	2018
Co-editor	<i>SI on Geospatial Modeling & Visualization - Big Earth Data</i>	2018
Advisory Board	<i>SUMO Challenge - ACCV</i>	2018
Research Group Lead	<i>Women in Shape Modeling Research Workshop (WiSH3)</i>	2018
Workshop Chair	<i>DeepGlobe 2018 Satellite Challenge - CVPR</i>	2018
Organizing Committee	<i>WiCV 2018 - CVPR</i>	2018
Communities Committee	<i>GHC</i>	2015, 2017
General Representative	<i>Turkish Women in Computing - Anita Borg Institute</i>	2014 - 2017
GHC/ABI LinkedIn Manager	<i>Anita Borg Institute</i>	2014 - 2017
Performance Coordinator	<i>Purdue Salsa Club</i>	2013 - 2015
Communities Volunteer	<i>GHC</i>	2013 - 2014
Treasurer	<i>Purdue Turkish Student Association</i>	2013 - 2014
Publication Chair	<i>Computer Science Student Workshop '13</i>	2013
Global Ambassador	<i>Purdue University Graduate Admissions</i>	2012 - 2016
President of the Board	<i>Computer Club, METU</i>	2009 - 2010
Editor-in-Chief	<i>e-Bergi</i>	2007 - 2011
Program Committee Chair	<i>BILMOK '09</i>	2009
Board Member	<i>Computer Club, METU</i>	2008 - 2009

Reviewer/Program Committee

Eurographics/Computer Graphics Forum	Computers & Graphics - Elsevier
IEEE Computer Vision and Pattern Recognition	IEEE CVPR - WiCV, DeepGlobe, EarthVision
Remote Sensing - MDPI	Living Planet Symposium - ESA
Computer-Aided Design (CAD) - Elsevier	IEEE Transactions on Geoscience and Remote Sensing
IEEE Computer Graphics and Applications	NeurIPS - WiML
IEEE Geoscience and Remote Sensing Letters	ISPRS International Journal of Geo-Information
Computer Science Student Workshop	IEEE Trans. on Pattern Analysis and Machine Intelligence
Grace Hopper Celebration of Women in Computing	
IEEE Journal of Selected Topics in Earth Observation and Remote Sensing	

Invited Talks & Presentations

- ◇ “Heart to Heart and Eye-to-Eye with Deep Fakes”, **MLConf**, Nov 20. (Oral)
- ◇ “The Future of Filmmaking: AI for Volumetric Capture”, **Data Science Salon**, LA, CA. Sept 20. (Talk)
- ◇ “Deep Learning in RS: Challenges, Solutions, and What Makes Us Different”, **IGARSS 20**, Sept 20. (Invited Panel)
- ◇ “The Science of Generative Art: Proceduralization”, **Stanford LASER**, Stanford, CA. Sept 20. (Invited)
- ◇ “The Future of Immersive Filmmaking: Behind the Scenes at Intel Studios”, **SIGGRAPH 2020**, Aug 20. (Exhibitor Talk)
- ◇ “METU CENG Alumni in US Panel”, **METU CENG YouTube Stream**, Aug 20. (Panel)
- ◇ Opening remarks, **CVPR**, Deep Learning for Geometric Computing Workshop. June 20. (Talk)
- ◇ “SkelNetOn Datasets & Challenges”, **CVPR**, Deep Learning for Geometric Computing Workshop. June 20. (Talk)
- ◇ “Generative Models: Shapes, Perception, and Deep Fakes”, **Deep Learning World**, Las Vegas, NV. June 20. (Talk)
- ◇ “Generative Representations of the World and Street Addresses Deep Dive”, **Xerox PARC**, CA. Jan 20. (Seminar)
- ◇ “Generative Representations of the World”, **Google**, Seattle, WA. Jan 20. (Tech talk)
- ◇ “Generative Representations of the World”, **AMFAM**, Madison, WI. Dec 19. (Tech talk)
- ◇ “Generative Representations of the World”, **RIKEN**, Tokyo, Japan. July 19. (Seminar)
- ◇ “A Computer Vision Perspective on Analyzing and Synthesizing Geospatial Data”, **IGARSS**, July 19. (Invited)
- ◇ “Analysis and Synthesis Approaches for Geospatial Machine Learning”, **IEEE GRSS TV**, June 19. (Webinar)
- ◇ Opening remarks, **CVPR**, Deep Learning for Geometric Shape Understanding, Long Beach, CA. June 19. (Talk)
- ◇ “SkelNetOn 2019: Dataset & Challenge on Deep Learning for Geometric Shape Understanding”, **CVPR**, June 19. (Poster)
- ◇ “From Proceduralization to Deep Generative Models: The Journey of Shapes”, **IPAM Culinary WS**, June 19. (Invited)
- ◇ “A Holistic Framework for Addressing the World using Machine Learning”, **IPAM/UCLA**, May 19. (Poster)
- ◇ GL2019 Career Panel Session, **IPAM/UCLA**, May 19. (Panel)
- ◇ “On Expressive Shape Rep. from Generative Models to 3D Deep Learning”, **IPAM/UCLA**, April 19. (Seminar)
- ◇ “Generative Representations of the World”, **IPAM/UCLA**, April 19. (Poster)
- ◇ “On the Importance of Shape Representations for Deep Learning”, **AWM Research Symposium**, April 19. (Invited)
- ◇ “Geospatial Machine Learning for Urban Development”, **MLConf**, San Francisco, CA. Nov 18. (Oral)
- ◇ “Maps, Urban Data, and Geocoding in Graphics”, **SIGGRAPH '18**, Vancouver, BC, Canada. Aug 18. (BoF)
- ◇ “Generative Representations of the World”, **SIAM Annual Meeting**, Portland, OR. July 18. (Oral)
- ◇ “A Holistic Framework for Addressing the World using ML”, **CVPR, WiCV '18**, Salt Lake, UT. June 18. (Poster)
- ◇ “Generative Street Addresses from OSM”, **GIS Day @ Stanford**, Stanford, CA. Nov 17. (Lightning)
- ◇ “Robocodes Towards Generative Street Addresses”, **Bay Area Vision Meeting**, Menlo Park, CA. Nov 17. (Poster)
- ◇ “Generative Street Addresses from OSM”, **SOTM US '17**, Boulder, CO. Oct 17. (Oral)
- ◇ “Inverse Procedural Modeling for 3D Urban Models”, **GHC '17**, Orlando, FL. Oct 17. (Oral)
- ◇ “Maps, Urban Data, and Geocoding in Graphics”, **SIGGRAPH '17**, Los Angeles, CA. Aug 17. (BoF)
- ◇ “Robocodes Towards Generative Street Addresses”, **CVPR, EarthVision**, Honolulu, HI. July 17. (Oral & Poster)
- ◇ “On Proceduralization Approaches for Urban Data”, **CVPR, WiCV '17**, Honolulu, HI. July 17. (Poster)
- ◇ “Proceduralization of Urban Models”, **SIU '17**, Antalya, Turkey. May 17. (Oral)
- ◇ “Proceduralization of Urban Models”, **Eurographics '17 - DC**, Lyon, France. April 17. (Oral & Poster)
- ◇ “Proceduralization for Editing 3D Architecture”, **Intl. Conf. on 3D Vision (3DV)**, Stanford, CA. Oct 16. (Poster)
- ◇ “Inverse Procedural Modeling of 3D Models for Virtual Worlds”, **SIGGRAPH**, Anaheim, CA. July 16. (Course)
- ◇ “Procedural Editing of Building Point Clouds”, **CVPR, WiCV '16**, Las Vegas, NV. June 16. (Poster)
- ◇ “Procedural Editing of Building Point Clouds”, **CSESC**, Purdue University. April 16. (Oral & Poster)
- ◇ “Procedural Editing of Building Point Clouds”, **ICCV**, Santiago, Chile. Dec 15. (Poster)
- ◇ “Proceduralization of Urban Models”, **Grace Hopper Celebration (GHC)**, Houston, TX. Oct 15. (Oral)
- ◇ “Coupled Segmentation and Similarity Detection for Architectural Models”, **SIGGRAPH**, Aug 15. (Oral)
- ◇ “Proceduralization of Buildings at City Scale.”, **CSESC**, Purdue University, March 15. (Poster)
- ◇ “Urban Proceduralization for Various Environments”, **Seminar for CEng**, METU, Ankara, Turkey. Dec 14. (Oral)
- ◇ “Proceduralization of Buildings at City Scale”, **Intl. Conf. on 3D Vision (3DV)**, Tokyo, Japan. Dec 14. (Poster)
- ◇ “3D Process Quality Analyzer”, **Faculty Convocation**, College of Technology, Purdue University. April 11. (Poster)
- ◇ “Academic Career Planning Abroad”, **“What’s Up in Informatics World?” Conf.**, METU. April 10. (Panel)

Selected Press Coverage

- ◇ “How Data Science is Changing Media, Advertising, and Entertainment”, **hackernoon by DSS**, Aug 20. (Interview)
- ◇ Featured in **1 Million Women in Stem Campaign**, June 20.
- ◇ “Improved 3D Printing: Near Convex Decomposition & Layering”, **3DPrint.com**, June 20.
- ◇ “From Observer to Leader”, **Wogrammer**, Sept 19.
- ◇ SkelNetOn Challenge & Workshop Interview, **Computer Vision News**, April 19.

- ◇ “Facebook and MIT Researchers Want to Use AI to Create Addresses for the Billions of People Who Don’t Have One”, **Gizmodo**. Nov 18.
- ◇ “Peut-on créer des adresses sans manquer d’adresse”, **Liberation**. Nov 18.
- ◇ “Billions of people lack an address. Machine learning could change that.”, **MIT Technology Review**. Nov 18.
- ◇ “WiCV at CVPR”, **Computer Vision News**. July 18.
- ◇ “The machine vision challenge to better analyze satellite images of Earth”, **MIT Technology Review**. May 18.
- ◇ Interview, **CVPR Daily**, Honolulu, HI. July 17.

Skills & Involvement

General: Good understanding of algorithms, data structures, programming paradigms, and design patterns.

Main programming languages: C, C++, Python

Coded several projects in: Java, Bash, SQL, MATLAB

Coded at least one project in: Assembly, Haskell, Scheme, XHTML, CSS, Prolog, PHP, XML

Tools & Applications: L^AT_EX, Qt, OpenCV, PCL, OpenGL, PyTorch, Open3D, igl, chainer, GNU tools (gcc, gdb), Eclipse, Netbeans, XCode, Sublime, vim, Glut, Glui, PQLabs SDK, OpenNI, Nite, wxWidgets, JRE-AWT, JSP, JDBC, Tomcat, SVN, P4, MySQL, Visual Studio, Sublime, Bugzilla, Traction, grok, Meshlab, 3DS Max, Maya, Virtuozzo, Dashing, Atom, Nuclide.

Member of ACM, IEEE, Eurographics, ACM-W, CRA-W, Syssters, WiML, AWM - WiSh, Women TechMakers, WiMLDS.