

# Demircan Taş

## Design & Research in Computer Graphics and Vision

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### Demircan Tas

02139, Cambridge/Massachusetts

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[demircantas@gmail.com](mailto:demircantas@gmail.com)  
[demircantas.com](http://demircantas.com)

Designer / Researcher with 11 years of professional experience in computer graphics & animation, focused on design computation and computer vision.

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### Education

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#### Massachusetts Institute of Technology / SMArchS in Design & Computation

2023 (expected), Cambridge, MA

Master of Science in Architecture Studies / School of Architecture

#### Massachusetts Institute of Technology / SM in Electrical Engineering and Computer Science

2023 (expected), Cambridge, MA

Master of Science in Electrical Engineering and Computer Science / Department of Electrical Engineering and Computer Science

#### Istanbul Technical University / Master of Science in Architecture

Graduated in 2019, ISTANBUL

Architectural Design Computing Masters Program / School of Science Technology and Engineering / Chair of Informatics

#### Istanbul Technical University / Bachelor of Science in Landscape Architecture

Graduated in 2011, ISTANBUL

Bachelors Program in Landscape Architecture / Faculty of Architecture

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## Experience

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### Massachusetts Institute of Technology / Research Assistant

2021 - 2023, Cambridge, MA

Urban Metabolism Group / Building Technology

### Massachusetts Institute of Technology / Teaching Assistant

2021 - 2023, Cambridge, MA

6.8300 - Advances in Computer Vision - William T. Freeman, Vincent Sitzmann, Antonio Torralba, Mina Konakovic Lukovic (Upcoming - Spring 2023)

6.9020[J] - How to Make (Almost) Anything - Neil Gershenfeld (Fall 2021)

4.542 - Background to Shape Grammars - George Stiny (Spring 2022)

4.500 - Introduction to Design Computing - Larry Sass (Fall 2021)

### Istanbul Technical University / Researcher

2020 - 2021, Istanbul

Worked on implementing computer vision tools for interactive shape detection on dense photogrammetry models of medieval Anatolian heritage for the TUBITAK funded project 119K896, by Prof Mine Özkar. Collected and processed heritage data for the project.

### Anima Okul / Lecturer

2014 - 2021, Istanbul

Teaching the courses: *3D Modeling with Maya and ZBrush*, *Introduction to Digital Rendering and Compositing*, *3D Techniques for Design & Production*.

[animaokul.com/hakkimizda/egitmenler/demircan-tas](http://animaokul.com/hakkimizda/egitmenler/demircan-tas)

### Freelance / Design - Computer Generated Imagery

2012 - 2021, Istanbul

Providing services for conceptual design, making and visualization within the fields of architecture, industrial design and entertainment.

[demircantas.com](http://demircantas.com)

### Industriromantik / Design - Computer Generated Imagery

2013, Gothenburg

Worked as a freelancer on architectural projects, modeling, texturing and rendering environments including landscapes, architecture, interiors and assets. Also worked on modeling, texturing and rendering of commercial product designs.

[Industriromantik.se](http://Industriromantik.se)

### Lighthouse VFX / Design - Computer Generated Imagery

2010 - 2012, Istanbul

Worked on architectural projects, modeling, texturing and rendering environments including landscapes, architecture, interiors and props.

[lhvfx.com](http://lhvfx.com)

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## Skills

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### Production Level / Software

Maya (MtoA, VRay, Redshift, nucleus, XGEN, MASH) ZBrush, Studio Tools (Autodesk Alias), NUKE, Photoshop

### Advanced Level / Software

Rhino (Grasshopper), Unreal Engine 4, MARI, Substance (Designer, Painter), Blender, 3ds Max, Softimage XSI, Adobe Creative Suite, AutoCAD, KiCad (Embedded systems design)

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## Languages

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### Native / Turkish

**Fluent / English** (TOEFL IBT - 112/120), Python (OpenCV, PyTorch, PyMel)

**Intermediate / C++** (Embedded programming, Unreal Engine - VR Development)

**Beginner / Swedish**, HTML - CSS - JS, Java

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## Academic Works & Awards

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### Massachusetts Institute of Technology 2022 / Design X 2023

Cohort - Team Construct()

December 2022, CAMBRIDGE

Leader of Team Construct(), one of 10 finalists among 60 teams

### Massachusetts Institute of Technology 2021 / W. Danforth

Compton Memorial Scholarship

September 2021, CAMBRIDGE

50% funding scholarship for Fall 2022, Spring 2023 semesters

### Massachusetts Institute of Technology 2021 / Emerson

Scholarship

September 2021, CAMBRIDGE

50% funding scholarship for Fall 2021, Spring 2022 semesters

### Istanbul Technical University 2019 / Photogrammetry based heritage modeling with shape embedding (Masters Thesis)

July 2019, ISTANBUL

Thesis Advisor: Prof. Mine Özkar

### MSTAS 2019 / Fotogrametri Verilerinde Gömülü Biçim

Eşlemesiyle Yapısal Modellerin Oluşturulması (Conference Paper)

June 2019, KOCAELI

In collaboration with Prof. Mine Özkar

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## Academic Works (cont.)

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### **MSTAS 2018 / A Design System for Crossing Gaps with Rheotomic Surfaces and Allometry (Conference Paper)**

June 2018, ISPARTA

### **Formal Methods in Architecture / Generating Forms via Informed Motion, A Flight Inspired Method Based on Wind and Topography Data (Conference Paper\*)**

April 2018, PORTO

\*In collaboration with Osman Sümer

### **Computational Design Lab - ITU / Vice President**

January 2018 - July 2019, ISTANBUL

Founding member of the student club, focusing on providing access to tools, tutorials and discussions related to programming, digital fabrication and modeling in design.

### **CAAD Futures 2017 - Istanbul Technical University / Volunteer**

May 2017 - June 2017, ISTANBUL

Volunteer, responsible for lighting and sound systems, video recordings and photography, IT troubleshooting, technical organization.

### **Materiart - The Deck / Workshop Lead Team Member**

April 2019, LISBON

*"The MATERIART Lisbon Workshop will focus in one of the possible pathways existent in the intricated fabric of the City, searching for opportunities to intervene and add some new steps aiming to belong in this already long path that marks the human settlement in this territory since so long ago"*

[materiart.org/thedeck](http://materiart.org/thedeck)

### **Paradoxical Simulation / Workshop Attendee \*selected final work**

June 2018, ISTANBUL

*"The main aspiration of this workshop is to precisely develop a critical argument based on an individual research, which will translate into pure geometrical-formal exploration"*

[allblackform.com/ephemeral-figures/](http://allblackform.com/ephemeral-figures/)

[https://www.instagram.com/p/Bosc\\_0ghd5S/?utm\\_source=ig\\_web\\_copy\\_link](https://www.instagram.com/p/Bosc_0ghd5S/?utm_source=ig_web_copy_link)

### **Augmented Materials - Hybrid Design Mediums in Architectural Design / Workshop Attendee**

July 2017, ISTANBUL

*"This workshop aims to bring together researchers and practitioners who are interested in materials with embedded technologies and their utilization in architectural design processes"*

[Augmentedmaterials.wordpress.com](http://Augmentedmaterials.wordpress.com)

## **Trans-Disciplinary Models of Design Innovation / Workshop**

### **Attendee**

July 2017, ISTANBUL

*“The workshop resonates with the CAADFutures 2017 theme: ‘Future Trajectories of Computation in Design’ in the sense that special emphasis will be placed on how digital design tools/methods (i.e. computational design) can aid the achievement of transdisciplinary innovation”*

[ruenetwork.wixsite.com/transdisci-workshop](http://ruenetwork.wixsite.com/transdisci-workshop)

## **R3BUILD 3rd Annual EP Design Competition / 2nd Place**

March 2014, NEW YORK

*“The competition tasks students and young professionals with designing a single-family home to withstand extreme weather events for areas most susceptible to increased storm intensity, frequency, and sea level rise. Teams should consider the applicability of their design to modular, off-site construction to further take advantage of time constraints in rebuilding efforts following natural disasters. Teams should aim to meet LEED for Homes Gold v4 requirements”*

[urbangreencouncil.org/content/events/r3build-design-competition-0](http://urbangreencouncil.org/content/events/r3build-design-competition-0)