Ibrahim Ibrahim

Computational Designer, Technology Researcher

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I'm Ibrahim – a computational designer, and researcher. I study design technology at the Harvard Graduate School of Design in Cambridge, Massachusetts. My work focuses on creative machines, computational geometry and creative applications of machine learning within building technologies and design tools.

I concept, design, program and make real things that could impact the environments we live in. These objects and bits of code are spurred to adapt, augment, and transform the surroundings into something other than what was before. The resultant projects utilize the inextricable links between design, technology, digital fabrication, data, and art in both the virtual and real environments.

Education

Harvard University Graduate School of Design

Masters in Design Studies - Technology Mediums Cambridge, MA, Aug 2021-May 2023[expected]

Massachusetts Institute of Technology · Cross Registered Creative Machine Learning, Machines & Robotics Cambridge, MA, Aug 2021-Present

Harvard University SEAS · Cross Registered Computer Science & Macro, Micro, Nano Building Science Cambridge, MA, Aug 2021-Present

American University of Sharjah (AUS)

Bachelor of Architecture [NAAB Accredited] Sharjah, UAE, Aug 2012-May 2017

Skills

 ${\bf CAD}\cdot {\bf Rhino.}$ Grasshopper. Autodesk Fusion. Autodesk Maya. Bently Microstation. Z-brush.

Visualization · V-ray. Maxwell. Keyshot. Unreal Engine. Adobe Premiere Pro. Adobe AfterEffects.

Digital Fabrication · Robotics. Embedded Microprocessor Programming. Electronics. Mechanical Design. Kuka Robotic Arms. CAM Software. 3D-Printing. Casting. Laser. Metal Working.

Research · Design Thinking. Prototyping. Startup.

Projects

RockBot · (ibrahimibrahim.works/rockbot)

research on construction robots for irregular geometry fabrication

Coded Space · (ibrahimibrahim.works/codedspace)

Self-supporting system of free-form GFRC panels for small scale structures

Informed Verticality · (ibrahimibrahim.works/informedV) Research on generative design for vertical structures

Painterly Structures · (ibrahimibrahim.works/painterly) Making painterly assemblies through scavenging

NEOM Line · (https://www.neom.com/en-us/regions/whatistheline) (Morphosis Architects) · 170km smart city urban development

Design & Research Experience

mOrphosis Architects

Project Designer & Smart City Planner Los Angeles, CA, Aug 2019-Oct 2021

DAIMLAS

Al Startup · Co-Founder Toronto, Canada, May 2020-Aug 2021

College of Architecture, Art & Design (CAAD)

Construction Technology Labs Research Fellow Sharjah, UAE, Sep 2019-Sep 2020

UAE National Pavilion at the Venice Architecture Biennale

Researcher & Materials Lab Assistant Sharjah, UAE, 2019

mOrphosis Architects

Intern Architect & Shop Fabricator Los Angeles, CA, Jan-Jul 2018

OylerWu Collaborative

Architectural Intern & Digital Fabricator Los Angeles, CA, May-Aug 2016

Ensamble Studio

Architectural & Fabrication Intern Madrid, Spain, Jun-Aug 2015

Academic Experience

Harvard University

Introduction to Digital Fabrication & Electronics Cambridge, MA Jan 2022-Present

Digital Fabrication Labs (AUS)

Robotic Arm Fabrication Research Assistant · Ammar Kalo Sharjah, UAE, Jan-May 2019

Digital & Material Labs Fabrication Engineer Sharjah, UAE, Aug 2015-May 2017

American University of Sharjah

Architectural Theory Teaching Assistant · Kevin Mitchell Sharjah, UAE, Sep-Dec 2016

Art History Teaching Assistant $\,\cdot\,$ Profs. Martin Giesn & John Montague Sharjah, UAE, Sep2013-May 2014

Select Awards

Harvard University Dean's Merit Scholarship · 2021-2023
MIT Hackathon · First Place · May 2020
Zagreb Observation Tower · First Runner-up · 2019
Inaugural Emaar Research Fellowship · 2018
Middle East Emergent Designer Award · 2017
Sheikh Khalifa Merit Scholarship · 2016-2017
Dean's Award for Academic Excellence · 2017
Sheikha Manal Young Artist Award · First Place · 2016
MAD · Motivation Attitude Dedication Award · 2016

Exhibitions & Conferences

MADAR · Dubai, UAE, Nov2019 ASCA · Denver, CO·Mar 2018 ASCA · Madrid, Spain, Jun 2018

Amman Design Week · Amman, Jordan, Oct 2017 Dubai Design Week · Dubai, UAE, Nov 2017