

UX designer focused on 3D
AR/VR, fabrication, CAD, robotics

Education

- Aug 2017 - Aug 2018 **Master of Human-Computer Interaction**
Carnegie Mellon University, Pittsburgh, PA
- 2015 - 2016 **Fulbright Research Fellowship**
Royal Danish Academy of Arts, Copenhagen, Denmark
[Thesis - "3D: How Digital Tools are Changing Danish Design Culture"](#)
- 2007 - 2012 **Bachelor of Architecture, Cum Laude**
Cal Poly State University, San Luis Obispo, CA
[Minors in Spanish and Sustainable Environments](#)

Consulting Work

- 2009 - 2017 **Digital Toolbox, Founder and Co-Director**
Founded [digitaltoolbox.info](#), an educational startup for makers.
This morphed into a 3D design consulting practice for art,
architecture, and product design. Select clients:
- | | | |
|--------------------------------------|--------------------------------------|---------------------------------------|
| Neils Bohr Institute | Snøhetta | Control Group |
| Pratt Robotics | Yoko Ono | Alexis Bittar Jewelry |
| Plastarc Inc. | Jason Krugman Studio | OldCastle BE |

Select Clients and Project Roles

- 2014 - 2016 **Plastarc Inc., Spatial Interaction Designer**
Visualized qualitative and quantitative spatial data,
User research on workplace anthropology and provided design recommendations
- 2013 - 2017 **Jason Krugman Studio, Product Designer**
Launched a consumer lighting company called Splyt Light in collaboration
Led 3D design and fabrication of "Rhythm and Form" in Bethesda, MD
- 2013 - 2017 **Alexis Bittar, CAD Designer**
Jewelry design, surface modeling from hand sketch to production casting
- 2013 **Control Group, Designer**
"Workplace of the Future", design competition, video production
"Reinventing Payphones", Community Choice Award

Design Skills

User Research, Interviewing,
Sketching, Prototyping,
Concept Generation

Adobe CS, After Effects,
DSLR documentary video

Digital Modeling

Rhino, Grasshopper
T-Splines, Maya, 3ds
Inventor, Alias, Catia, Revit

RobotStudio, HAL,
Industrial Robotics,
CNC Prototyping, 3D Printing

Languages

Python, Unity/C#
C++ via openFrameworks
ThreeJS/WebGL, HTML/CSS/JS

Processing, Arduino, bash
Fluent Spanish,
conversational Danish

Teaching

- 2015 Spring **NYU ITP**, Adjunct Faculty, New York
"Sculpting Data with Everyday Objects", Co-taught with Esther Cheung
- 2014 - 2015 **CUNY City Tech**, Lecturer, New York
Led graduate certificate class "Modeling for Fabrication", with Charlie Portelli
- 2012 - 2013 **Columbia GSAPP**, Guest Lecturer, New York
"Integrated Parametric Delivery", Co-taught with Mark Green

Select Publications

- 2016 [*Adaptive Robotic Fabrication For Conditions Of Material Inconsistency: Increasing The Geometric Accuracy Of Incrementally Formed Metal Panels: FABRICATE 2016*](#)
Paul Nicholas, Mateusz Zwierzycki, Esben Clausen Nørgaard, Scott Leinweber, David Stasiuk, Christopher Hutchinson and Mette Thomsen
- 2016 [*Filigree Robotics, Posthuman Frontiers: Projects for the ACADIA 2016 Conference*](#)
CITA, KADK, Copenhagen. Martin Tamke, Flemming Tvede, Esben Norgaard
- 2015 [*Working without Borders: Flexible Workplace in an International Peacekeeping Organization, EDRA CORE 2015 Recipient - PLASTARC*](#)
Melissa Marsh, Ingrid Erickson, Cassie Hackel, Scott Leinweber
- 2011 Autodesk BIM Curriculum 2012 Author
Wrote Unit 6 on Performance-Based Conceptual Design with Ryan Lovett

Extra

- 2016 Patent - *Multiple Light Bulb Socket Adapter*, US 29561973
- 2014 Spring School for Poetic Computation, New York, NY
- 2010 - 2012 KCPR 91.3fm Disc Jockey