ANDRES FENG AIA Assoc.

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PROFESSIONAL EXPERIENCE

DumoLab | Researcher | Philadelphia, PA | January 2024 - June 2024

- Developed a robotic 3D-printing workflow for biomaterial printing with a CNC machine and UR-20 robotic arm through Grasshopper.
- Designed a 3D parametric model utilizing Rhino and Python components (Kangaroo and Karamba) for a 1:100 scale prototype dome.
- Utilized parametric components to create a line-attractor Voronoi Pattern with Parakeet component for Grasshopper.
- Studied and tested over 50 biodegradable material compositions for a mycelium-based material.

The Architectural Team | Designer | Boston, MA | January 2023 - July 2023

- Created custom Revit components such as families of furniture and fixtures, and wall types for multi-family residential buildings.
- Produced construction documents, including plans, sections, elevations, and details from Revit models.
- Generated and managed Revit schedules for various elements, such as rooms and apartment types.
- Designed five detailed 3D model proposals of façades and elevation renderings with SketchUp 3D and different custom components.
- Led three design productions of presentation packages for a high-profile client's commercial and multi-family projects, focusing on master plan colorization, utilizing Adobe Photoshop, InDesign, and Illustrator.
- Executed comprehensive site analysis in Chelsea, MA, incorporating collected and photographed over 200 site images.
- Proposed five plan options in AutoCAD to meet client's requirements and local Zoning Codes for a residential development project of 500 units, corroborating square footage and parking allocation in Microsoft Excel.

JCBT Architects | Project Designer | Quincy, MA | October 2020 - December 2022

- Modeled detailed interior design options in Rhino for commercial establishments for rendering and visualization with V-Ray.
- Oversaw over 150 residential and commercial building application permit packages for the local DOB, including plans and elevations, structural framing, and detailed sections with AutoCAD.
- Partook in all aspects of architectural design phases, such as site measuring, design development, and construction administration.
- Corroborated designs to comply with the Building Code, local Zoning Regulations, Conservation Commission, and Historic Preservation.
- Mentored a team of 5 junior designers, reviewing their work to ensure adherence to architectural processes and quality standards.
- Facilitated and coordinated 1-on-1 communications among clients, architects, and contractors.

Gensler | Architectural Intern | San José, Costa Rica | July 2017 - January 2018

- Developed three schematic design options in Revit for commercial office spaces, following the client's benching requirements.
- Organized consultation packages in InDesign for an international airline, creating component schedules in Revit.

EDUCATION

Master of Science in Design | University of Pennsylvania | Philadelphia, PA | August 2023- May 2024

Robotics and Autonomous Systems Concentration

- Designed fabrication workflows for material technologies developing custom digital fabrication tools.
- Programmed with Grasshopper, Python, and C++ for robotic systems; coded and prototyped interactive components with Arduino.
- Recipient for RAS Program for Design & Robotic Fabrication awarded to the most outstanding final project reflecting innovative research in design and robotic fabrication.

Bachelor's Degree in Architecture | Syracuse University | Syracuse, NY | August 2015- May 2020

Dean's List, Peer Advisor, and Student Ambassador

- Applied Grasshopper components for environmental data analysis (light, energy, and wind) and visualization such as Ladybug and DIVA.
- Recipient of the Citation for Excellence in Thesis Design, awarded to the thesis project with outstanding thesis design achievements integrating theoretical knowledge with practical application.

SKILLS

Computational Design and Digital Modeling | Revit, AutoCAD, Rhino 7, SketchUp, ZBrush, Maya, Grasshopper, Karamba, Kangaroo, Rhinoscript, OpenCV, DIVA, ArcGIS Pro, and Arduino | **Digital Fabrication** | Robotic Arm (UR 10, UR 20, ABB 120, ABB 6400), Laser Cutting, CNC Milling, 3-D Printing, Vacuum Forming | **Visualization** | Adobe Photoshop, Adobe Illustrator, Keyshot, V-Ray, Enscape, Adobe Premier Pro, Adobe After Effects, 3DS Max | **Utilities** | Bluebeam, Adobe Acrobat Pro, Microsoft Office (Word, Excel, PowerPoint), and Google Suite (Docs, Sheets, Slides) | **Languages and Coding** | English, Spanish, Cantonese, Mandarin, Python, and C++.