

P. Zach Ali

INFO

Designer

412.913.1951
zach@pzali.com

5810 Keystone Dr
Bethel Park, PA 15102

PROFILE

I am passionate about the Design process. Focusing on finding new ways to utilize current technologies & equipment; while encouraging collaboration between individuals & teams by eliminating technological barriers. Advocating for community & culture through shared knowledge, building relationships, & ownership. Strong preference on working with teams & human-centered design.

SKILLS

DESIGN

Digital + Traditional Fabrication, Rapid Prototyping, Mold-Making, Human Factors, Ergonomics, Client Communication, Product Presentation, Design Theory, Manufacturing Processes, Material Knowledge, Facility Layout/Development, Community & Culture Design/Development, Vendor/Supplier Relations, Technical Drawing, Color Theory, Sketching, Small Product Design, Graphic & Web Design, Boat Design, Integrative & UX Design, Wearable Tech, Interior Design, Exhibit Design, Engineering, Recreational & Game/Toy Design, Architecture

STYLE

Creative Leader, Project Manager, Collaborative, Team Contributor, Instructor, Guide/Mentor, Human experience, sky-blue collar personality

SOFTWARE

Rhinoceros 3D, AutoCAD, Fusion 360, Solidworks, Inventor, SketchUP, RhinoCAM, VisualCAM, MasterCAM, RobotMaster, Robot Studio, VisCam for Solidworks, ArtCam, All 3D Print Processors, All Laser Processors, Adobe Suite, Corel Draw, Google Drawings, Wordpress, Processing, Arduino, Particle.dev, Ruby, PHP, Grasshopper, Google Suite, Microsoft Office, Zoho & Filemaker

EQUIPMENT

Selection/purchase/integration/maintenance/instruction/supervision/use of Traditional Woodworking, Traditional Metal-Working, 3D Printer, Laser Cutter/Engraver, CNC Router/Mill/Lathe, 3D Scanner, Robotic Arms, Audio/Video Recording, Pneumatic, Plumbing, Electrical, Flooring, Welding, Plasma Cutter, Water Jet, Sand/Media Blaster, Soldering Iron, Oscilloscope, Fast Motion Capture

MATERIALS

All lumber, plastics, high & low density foam, paper products, hybrids, composites, clay, aluminum, steel, textiles

P. Zach Ali

EDUCATION

2014 - PRESENT

M. S. Self-Defined, Carnegie Mellon University

2008

B. S. Industrial Design, The Art Institute of Pittsburgh

EXPERIENCE

2017 - PRESENT

Integrative Designer & Consultant
Carnegie Mellon University, ANSYS Makerwing
University of Southern California, IYA MakerHall

2015 - PRESENT

Co-Principal & Founder
Higher Education Makerspace Initiative (HEMI)

2015 - PRESENT

Instructor
Massachusetts Institute of Technology

2014 - 2017

Technical Director
Carnegie Mellon University, Integrative Design, Arts & Technology

2016

Integrative Designer & Consultant
Independence Middle School, Makerspace
NewPig, DesignLab

2015

Integrative Designer & Consultant
Carnegie Mellon University, IDeATe@Steiner Studios
Carnegie Mellon University, Morewood Gardens Makerspace

2014

Integrative Designer & Consultant
Carnegie Mellon University, IDeATe@Hunt Library

2010 - 2014

Adjunct Instructor
Carnegie Mellon University, Schools' of Architecture, Art, Design

2008 - 2014

Digital Fabrication Lab Manager
Carnegie Mellon University, School of Architecture

2012

Integrative Designer & Consultant
Carnegie Mellon Univ., Gates-Hillman Center for Computer Science
Techshop @ Bakery Square

2008 - 2012

Design Consultant & Rapid Prototyping
DESINE4 (Self-Employed)

2008

Integrative Designer
Carnegie Mellon University, Digital Fabrication Lab (dFab)

2006 - 2008

Technical Lead
The Art Institute of Pittsburgh

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ACCOMPLISHMENTS

2017

Event, Co-Coordinator

International Symposium on Academic Makerspaces (ISAM 2017) by Higher Education Makerspace Initiative (HEMI)

2016

Publication, Author

"The Power of Investing in Building Relationships, Collaboration & Ownership", International Symposium on Academic Makerspaces (ISAM 2016)

2016

Event, Co-Coordinator

International Symposium on Academic Makerspaces (ISAM 2016) by Higher Education Makerspace Initiative (HEMI)

2013

Publication, Co-Author & Adviser

"Pinch Wall" by Jeremy Ficca & P. Zach Ali, Performative Materials in Architecture & Design

2011

Certification, Participant

MasterCAM Multi-Axis Programming Certification, MasterCAM University

2008

Award, Recipient

Best of Show, Industrial Design Award, The Art Institute of Pittsburgh

2007

Competition, Participant & Contributor

"Plug and Play House" by Carnegie Mellon University's School of Architecture, Solar Decathlon Competition