

Tierney Putman

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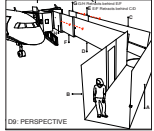
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A Passion for Cultivating Art to Create Understanding & Action.

With a demonstrated history of vertically integrated professional services, Tierney has combined her passions for art, engineering and teaching, to craft design solutions that have fit the clients budgets, exceeded their expectations, taught, inspired, informed and delighted. From the original Children's Museum, to the Golf Course Community of TroyBurne, she has been instrumental in creating real-world, physical results that have stood the test of time and become part of our environment. Keeping current with trends in technology has lead to a parallel profession using, and teaching others to use, rapid prototyping tools and processes to further their own inventive & entrepreneurial endeavors - from 1-off's to light manufacturing.

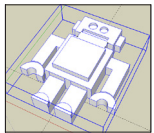
Experience

Contingent Assignments - Current Utilizing niche skills such as model-making, map-making, environmental graphic design & technical illustration on project-based assignments;



- **Belwin Conservancy** - Four large-scale land holdings site plan displays; design, engineering drawing procurement and production expediting for membership drive and fund-raising event.
- **Stantec Professional Design & Consulting Services** - Master Plan Visioning Presentation Document for Lake City, MN; on-call, quick-turnaround Graphic Design services for publication, PowerPoint presentation and displays.
- **Delta Airlines/3M Commercial Graphics & Signage** - Jetway Surveys; 45 wall elevation & perspective dimensioned, technical drawings for wall wraps, 100+ jetways; vinyl graphics installation, 100+ baggage carts; large-scale cart wrap installation, Delta SkyClub privacy panel vinyl installation, all consistent with Delta's branding specifications.

FabLab "To Go!"™ - Math & Science Academy; Woodbury, MN - 2013/2014 Academic Year



Utilizing our portable learning lab equipment; Knife-Plotter(s), Laser-Cutter, 3D Scanner(s), 3D Printer(s), CNC Router & Mini-Mill, and our authored curriculum, we delivered projects which engaged high school student in STEM (Science, Technology, Engineering & Math) concepts and processes through hands-on "making" and design lessons that dovetailed with MN State Standards. Our contribution to the democratization of digital fabrication principles & processes.

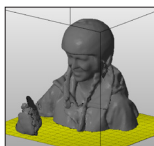
University of St. Thomas; St. Paul, MN



Adjunct Lab Coordinator/Lab Curriculum Developer - 2012/2013 Academic Year
S.T.E.P.s (Science, Technology, Engineering, Preview Summer Camp) Instructor - June-August, 2012 and 2013

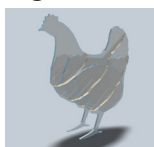
Taught 5 sections of University Level Prototyping for Engineering 171 and 560 Summer Campers - girls entering 7th and 9th grade, with an interest in pursuing studies in Engineering - how to prepare 2D and 3D files suitable for a 3D printer, Laser-Cutter and Knife-Plotter.

Digital Fabrication Laboratory (FabLab) Specialist & Instructor - Mahtomedi High School- August, 2011-June, 2012



- Integration of digital prototyping technology into interdisciplinary studies
- Adaptation of MIT/Fab Academy curriculum to the first FabLab in a K-12 setting in the world; teaching full sections of high school students by day and adult learners in the evening while also maintaining daily operations of the Lab.
- Extending digital design and fabrication to Community Outreach programs; North St. Paul District integration
- Curriculum mapping the "How to Make Almost Anything" course into State Science & Engineering Standards.
- Setup and maintain FabLab equipment and more than 30 applications & plug-ins to support all users of the Lab.
- Presentations, tours and interviews to School Boards, other School Districts, community members and news media.

Digital Fabrication Laboratory (FabLab) Coordinator/CLA2 - Century College - August, 2010 - 2011 (while participating in Fab Academy);



- Extensive knowledge of digital fabrication tools, technology and methods
- Assist & tutor students, tours & class demonstrations of software/hardware, FabLab/ECAD/Engineering Department as well as being instrumental in including other Campus-wide Departments in the implementation of the FabLab as an extension of their own labs; 3D Art & Design Studios, Chemistry Labs, Math Labs
- Daily operations; supply requisitions, equipment maintenance, materials and work-study resource management.

Environmental & Graphic Designer; Development Directions, Inc./Putman Planning & Design, Inc. -



- Primary contact for developing FabLabs into new and existing communities and schools
- Concept-through-Final project approval packages, highly technical documents, educational materials & copywriting
- Innovative use of 3D printing/rapid prototyping
- Virtual reality tours
- Project identity and application; from print materials to web presence, to interior & exterior banners, to large scale entry settings in metal, wood and/or stone
- On-site and off-site wayfinding systems
- More than 20 visitor centers/information centers; detailed 3D drawings, vendor/sub-contractor bids & liaison including the design, fabrication and installation of displays, print and advertising campaign coordination and management.
- Demographics data mining
- Charting demographics to indicate market trends
- Daily operations; proposals, contracts, budgets, project administration, invoices, project profit/loss analysis for determining future costing
- Digital asset management; large format scanning, cataloging and retrieval of thousands of images

Fab Academy- Graduate & Credentialed Guru

Directed by Neil Gershenfeld; MIT, Center for Bits and Atoms, the Fab Academy provides instruction and supervises investigation of mechanisms, applications, and implications of digital fabrication. The Fab Academy Diploma is the result of the sum of 20 Fab Academy Certificates, which is comparable to completing MIT's Masters Level rapid-prototyping course "How To Make (almost) Anything".

Century College - FabLab; How to Make (almost) Anything; based on M.I.T.'s like-titled program

Minneapolis College of Art & Design - Bachelor of Fine Arts - Graphic Design, emphasis on Environmental Design

University of Minnesota - Art History

Minneapolis Area Vocational/Technical Institute - Commercial Art

College of St. Benedict - Associate of Arts; Liberal Studies

Skills:

Computer Proficiency (Mac & Windows)

- Adobe Creative Suite
- ArhiCAD
- SketchUp Pro
 - Slicemodeler
 - Flattery
 - Layout
 - .dxf, .stl, .svg scripts/plugins
- Keynote/PowerPoint
- Large-format Scanning
 - PowerFile; digital asset management system
- AutoCAD/CorelDraw/Inkscape as a basis for:
 - Laser Cutting & Engraving
 - Vinyl & Circuit Board Cutting
 - PartWorks files & ShopBot CNC routing
- 3D Scanning; mesh & point cloud
 - Structure Sensor 3D scanner
 - NextEngine 3D scanner
 - ReconstructMe
 - NetFab
 - MeshLab
 - Meshmixer
 - Kinect2stl
 - Modela/Dr. Picza
- 3D modeling:
 - SketchUp/SolidWorks
 - Faceworx
 - Pepakura Designer
 - SketchChair
 - Meshlab
 - NetFab
 - BoxGenerator
 - 123D Make, 123D Catch
- 3D Printing/Prototyping Software:
 - Catalyst; Dimension Elite
 - PrintWizard; MOJO
 - ReplicatorG; Thing-o-Matic
 - UP! 3D Printer
 - Form1; SLS 3D resin printer
 - Z-Print for Z-Corp 340+
- CAD Drafting/Drawings:
 - SketchUp; Layout
 - SolidWorks Assemblies and
 - SolidWorks Drawings
- G-code basics for 3D Printing:
 - frostforge.py (Frostruding with the Thing-o-Matic)
- Circuit Design,
 - Eagle, Fritzing
 - Milling & Stuffing/
 - Component Soldering
- Microcontroller Programming
 - Arduino

Computer Proficiency (Ubuntu);

- cad.py

Studio Arts Proficiency;

- Pencil/Colored Pencil/
- Water Color Pencil
- Acrylic Paints
- Silkscreening
- Paper Architecture/Paper
- Engineering/Paper Sculpture

Advanced Skills in;

- Presentation Graphics
- including use of Virtual Tours
- & Movies
- Exhibits/Displays/Interactive
- Touchscreens
- PhotoMosaics



www.tierneyputmanwebfolio.com

Online Portfolio:

References:

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John Huizinga
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