

MICHAEL DARFLER

CONTACT INFORMATION

Michael Darfler
1611 S. 16TH Street
Philadelphia, PA

website: www.michaeldarfler.com
email: mdarfler@gmail.com
phone: 607.227.8530

EDUCATION

BS -Bioengineering *Binghamton University / Binghamton, NY*

09/03 - 06/07

EMPLOYMENT

Makerspace Director, CompSci Faculty *Friends' Central School / Wynnewood, PA* *06/16 - present*

Direct the operation of a makerspace for 500 students grades 6 - 12. Work with teachers to develop new curricular opportunities for their students. Teach 8th grade computer science and two upper school computer science classes. Collaborate with faculty across divisions to integrate computational thinking and programming into curricula. Directed the opening of new middle school makerspace.

Program Director *Abington Art Center / Jenkintown, PA*

01/16 – 05/16

Planned, developed, and implemented a new collaborative makerspace and innovation lab, in partnership with Penn State Abington with support from the Montgomery County Economic Development Corporation, that combines traditional art modalities with high-tech digital fabrication to inspire creativity and improve access to entrepreneurial opportunities.

Program Manager *Department of Making + Doing / Philadelphia, PA*

09/13 – 12/15

Managed a 4,000 sq ft makerspace focused on empowering youths and communities through hands-on learning. Developed, implemented, and managed wide-ranging programs for youth, adults, and families; planned and coordinated marketing and promotion strategies; cultivated and maintained community partnerships and volunteers; designed and implemented operational, safety, and preventative maintenance protocols for traditional and digital fabrication equipment; prepared budget and managed finances for space and programming; created and reported relevant metrics on space and program use.

Custom Fabricator *Ithaca, NY; New York, NY; Philadelphia, PA*

04/07 – 09/13

Specialized in custom woodworking, furniture design, hardscapes, landscapes, fabrication and installation for individuals, contractors, and designers.

Project Manager *Archway Builders / Philadelphia, PA*

10/12 – 09/13

Responsible for the successful on-time completion of construction projects; coordinating subcontractors; supervising workers; and managing relationship with architects, designers and clients.

MICHAEL DARFLER

Project Manager *Paul Hansen Design & Construction | Danby, NY* 06/10 – 06/12

Maintained client relationships and a team of workers in renovation and new construction projects. Extensive on-site problem solving for complex projects.

Surveyor & CAD Drafter *Claudia Brenner, Architect | Ithaca, NY* 12/09 – 05/10

Produced detailed and accurate construction documents, measured drawings, and 3D models from design sketches and existing buildings.

RESEARCH

Research Scholar *College of Computing and Informatics, Drexel University | Phila, PA* 6/18 – 8/18

Conducted research through the NSF-funded *Research Experience for Teachers: Site for Machine Learning to Enhance Human-Centered Computing*. Worked with an interdisciplinary team of engineers, designers,, and medical doctors aimed at developing statistical and numerical tools for improving signal separation from woven RFID antennas. Developed tests for assessing and reporting efficacy. Attended and presented at weekly lab meetings with the Principal Investigator. Attended and presented biweekly at lab meetings.

Technical Advisor *Arcadia University | Glenside, PA, Siracusa, Italy* 2014

Provided technical support for 3D printing fabrication and documentation. Co-authored book chapter: Matlock, S., **Darfler, M.**, Tanasi, D. Forensic facial reconstruction of a woman from Copper Age Sicily: the case study of Scintilia. *STORIE SEPOLTE: Riti, culti e vita quotidiana all'alba del IV millennio a.C.* 2014

Research Technician *Binghamton University | Binghamton, NY* 05/05 – 01/06

Assisted with research investigating the use of biomarkers for developing a test for Polycystic Ovarian Syndrome. Created algorithms to analyze large amounts of information to detect patterns and similarities across multiple data sets.

LEADERSHIP AND SERVICE

Leadership Philadelphia | *Philadelphia, PA* 07/18 - present

Nominated to the *Philadelphia Connectors and Keepers* class of 2019 based on previous leadership experience and civic engagement.

Masterman School | *Philadelphia, PA* 11/17 – present

Provide resources, recommendations, and feedback for the development of a new 9 -12 makerspace.

Anderson Elementary School | *Philadelphia, PA* 10/17 - present

Designed and facilitate an experiential service learning program to connect high school students from FCS with elementary school students from Anderson on visioning and prototyping a school makerspace.

MICHAEL DARFLER

Science Leadership Academy | Philadelphia, PA

09/16 – present

Assist with developing a quality Career and Technical Education program for students and creating a stronger link with business, industry, and postsecondary institutions to prepare future professionals.

Public Workshop | Philadelphia, PA

08/12 – 04/14

Managed project logistics, coordinated with collaborators, and helped lead volunteers, community members and youth in the design and building of projects that improve public spaces in diverse neighborhoods throughout Philadelphia. Maintained a strong and vibrant social media presence.

Engineers Without Borders | Binghamton University & Brown University

10/06 – 05/07

As part of an intercollegiate exploratory team, traveled to Iquitos, Peru to investigate the feasibility of creating a 6000 sq. ft. medical facility to help provide access to 75,000 underserved and disenfranchised individuals. Worked with local medical providers, engineers, and municipal and private utility companies to collect data for the creation of a formal feasibility study.

TEACHING AND CURRICULUM DEVELOPMENT

Friends Central School | Philadelphia, PA

- Instructor | *Introduction to Computer Science*
- Instructor | *CS2: Simulating the Natural World*
- Instructor | *Middle School Computer Science*
- Guest Instructor | *Introduction to 3D Modeling for Architectural Drawing*
- Member | Math Faculty
- Member | Teaching and Learning Committee
- Independent Study Advisor | *Game Design*
- Advisor | Coding Club, Game Club, Digital Editing Club, Maker Club

University of the Arts | Philadelphia, PA

- Course Creator | *Classroom as MakerSpace*

Abington Art Center | Jenkintown, PA

- Instructor | *Safety and Training*
- Instructor | *Introduction to Digital Fabrication*

Department of Making + Doing | Philadelphia, PA

- Instructor | *Introduction to Woodworking*
- Instructor | *Advanced Woodworking*
- Instructor | *Introduction to Laser Cutting*
- Instructor | *Safety and Training*

Binghamton University

- Teaching Assistant | *BE 202 - Biological Networks*

MICHAEL DARFLER

TECHNOLOGY, CODING, AND SKILLS

3D and 2D design including Adobe CC, Rhino 3D, Sketchup, and AutoCAD, email marketing, Wordpress, Filemaker.

Java, JavaScript, MatLab, HTML, CSS, Arduino C, Mathematica.

Traditional fabrication including woodworking, masonry, timber framing, metalworking, and sewing; digital fabrication including CNC routers, 3D printing, and laser cutting; electronics and microcontrollers.

GRANTS

PlusUs | *Design for Learning Grant* 2016

Principal - Engage school community in leveraging underutilized spaces into micro makerspaces on campus. \$8,000+

ArtPlace America | *Inventing the Future* 2013

Contributor - Engage community partners in activating a business corridor in Philadelphia through hands-on making activities, data collection, and placemaking activities. \$150,000

Knight Foundation | *Knight Arts Challenge* 2013

Contributor - Develop a partnership of four science, technology, and community organizations to activate 4,000 sq of ground floor retail in Philadelphia as a community-minded makerspace. \$100,000