Daniel Micah Bergey

1343 S. 52nd St. Apt. 1
Philadelphia, PA 19143

bergey@teallabs.org
617 · 800 · 4397

Experience

FRIENDS CENTRAL   WYNNEWOOD, PA
CS Teacher   2015-present

- Designed & taught two project-based computer science classes for grades 10-12
- CS1 - web design - HTML, Javascript, functions, arrays, lists
- CS2 - tools for engineering complex software, including git, Haskell, Java

DIAGRAMS   HTTP://PROJECTS.HASKELL.ORG/DIAGRAMS
Maintainer   2013-present

- Contributed >5000 lines of code, including path interpolation algorithms and 3D primitives
- Supervised releases to Hackage (Haskell-specific community package server)
- Supervising an undergraduate to integrate constraint-solving, through Google Summer of Code

THE HACKTORY   PHILADELPHIA, PA
Instructor & Volunteer   2012-present

- Developed curriculum for and taught 10-week middle school class *How Things Work*
- Taught 11-week elementary school Python class
- Taught adults Python data visualization, sewable circuits, Scratch, Raspberry Pi

BUILDING SCIENCE CORPORATION   SOMERVILLE, MA
Engineer   2008–2013

- Designed & executed field study on distribution effectiveness of single-point heating
- Wrote Python and Fortran code for HVAC simulations as part of ASHRAE RP-1449
- Analyzed sensor data on thermal distribution and moisture removal (~ 5 years & ~ 2 million lines)
- Recommended design parameters for net zero energy homes, including NIST test facility
- Sized residential HVAC systems and designed duct layouts for builders from Louisiana to Maine

Education

MASSACHUSETTS INSTITUTE OF TECHNOLOGY   CAMBRIDGE, MA
Bachelor of Science in Art and Design   2008

- Studies emphasized sustainability and energy in buildings

Skills

Programming	C, Fortran, Haskell, Java, Javascript, Lisp, Perl, Python
Software	CSS, HTML, Linux, SQL, git
Modeling	AutoCAD, BeOpt, EnergyGauge, EnergyPlus, RemRate, SketchUp, TRNSYS
Construction	Drywall, Plastering, Plumbing, Soldering, Wiring
Mechanical	Hand Forging, Machining, Welding, Wood Joinery
Languages	Hebrew, Hindi