

Matthias Elliott

Brooklyn, NY • <http://komizutama.com>

Summary

- Self-taught programmer, maker and hardware hacker, graduate of the Recurse Center (formerly Hacker School).
- 6 years of graduate-level research experience; strong quantitative analysis, verbal communication and writing skills.
- Film producer, photographer, sculptor and award-winning performance artist with over 100,000 views on Vimeo and Youtube.

Technical

Open Source Project Developer: St. Pete Makers

3/2015-Present

- Currently developing Arduino scripts for an open source GPS wildlife tracker tag using a sim908 GSM/GPS chip.

Programmer: Recurse Center (formerly Hacker School)

9/2015 - 12/2015

- Designed and prototyped a wearable LED circuit for a self-made leather top hat. Currently enabling sound responsiveness by implementing beat detection with a low pass filter and the fast Hartley transform algorithm.
- Created a satirical “productivity-tool” using Python and Objective-C that disruptively announces positive affirmations whenever the user types on their computer.
- Paired with a colleague to reproduce colors from an RGB-LED on screen using Python, SeaBreeze, NumPy, Pandas, Matplotlib and an Ocean Optics spectrophotometer.

Grand Prize Winner: Project 34 Hackathon

5/2-3/2 2015

- Recruited and led team that won a hackathon hosted by the Dalí museum and Vectorform aimed at enhancing the Dalí experience.
- Conceived and designed an interactive museum experience using Bluetooth Low Energy (BLE) beacons and a mobile app to enhance patron experience while providing data and feedback to the museum administration. Currently in development by Vectorform.

Winner, Best Microsoft Hack: NBC-Universal Hackathon

3/28-29/2015

- Recruited and led a team of 7 in a hackathon to create a spatially distributed interactive game, designed to eliminate ride queues. Designed a networked system that incorporated a mobile app, Microsoft Azure services and assorted hardware, including: a Philips Hue system, Raspberry Pi and a novel variable-BLE Beacon hub made from an Intel Edison.

Technician: Loggerhead Instruments

6/2014-12/2014

- Built marine acoustic recorders with solder mask, pick and pull, SMT and TH soldering.
- Performed firmware programming, updates and completed quality control testing.

Founder & President: Mud Power, Inc. (Acq. 2013)

4/2011-12/2013

- Founded cleantech company that was acquired by STEM genesis, LLC.
- Secured \$110k of funding in a Department of Energy funded X-prize type competition.

Circus Performance Artist: Hoola Monsters & Freelance

1/2010-Present

- Invited by private events, major festivals and network television to perform to audiences of over 4000. Delivered approximately 100 workshops across the US.
- Named the 2014 Male Hooper of the Year by Hooping.org.

Producer and Director, Multimedia Content for Brands: Freelance

12/2012-Present

- Produced, directed, filmed and edited marketing materials for Betabrand (San Francisco), Lululemon (Asheville), MeUndies(LA), Loggerhead Instruments (Sarasota), and MeggingsMan(Chicago). Used Photoshop, Illustrator, After Effects, Premiere Pro, Micro Four Thirds and Canon DSLR cameras.

Art & Design

2nd Assistant Photographer: Plota Productions**12/2013-7/2014**

- Coordinated set-up, lighting, and set dressing for photographs used in print and web marketing for Belk Department Stores.

Theatrical Production Artist: UNC-TV and Freelance**6/1999-6/2005**

- Comprehensive experience in backstage technical arts, including lighting design and setup, scenic design and construction, property design and fabrication, production management and costume sewing in professional wood, metal and costume shops.
- Designed, hand-drafted, constructed and repaired scenery and properties for state syndicated shows using full production shops at UNC-TV.

Masters Research: USF, College of Marine Science (CMS)**8/2012-12/2014**

- Designed and conducted a water-sampling project analyzing dissolved trace metals and carbon system parameters in the surface waters of a 400 square-mile estuary. Results streamlined regional fisheries research by improving domain knowledge.
- Used Microsoft: Excel & Word; ESRI: ArcMap; Ocean Dataview; Matlab; Origins Pro; Sigmaplot; Adobe: Photoshop, Illustrator & InDesign and to produce an 80-page thesis.

Research Assistant & Lab Manager: CMS & Center for Ocean Technology**6/2007-12/2011**

- Used spectrophotometry, mass spectroscopy and voltammetry to perform exploratory research. Field experience includes: shipboard, icebreaker, small craft, remote operated vehicle, and dive operations extending from the Equatorial Tropics to the Arctic Ocean.
- Managed operations of a research team, was responsible for procurement, service and technical development relations. Handled logistics for global scale deployments and coordination with other labs.
- Created custom apparatus for sampling using the university machine shop.
- Created sampling and lab analysis protocols with developmental instrumentation now licensed to SRI, International for production. Designed and executed development tests.

Initiated Non-Technical Checkin Group: Recurse Center**9/2015-12/2015**

- Started a weekly check-in meeting for current participants and alumni to discuss the social, emotional and intellectual challenges associated with being in a 3-month intensive programming workshop and pursuing a career in technical development.
- 69% of program participants and numerous alumni utilized the non-technical check-ins during the fall session. It was credited by numerous participants for strongly enhancing both their sense of community and productivity at RC.

Instructional Staff: Duke Talent Identification Program**6/2011**

- Developed course material, taught and mentored gifted high school students in a residential program for university credit.

Teaching Assistant: Eckerd College**9-12/2006**

- Organized field collection and taught taxonomy, natural history and experimental design for marine invertebrate biology.

Art & Design

Photography, Videography, Sculpture, Drawing, Mechanical Drafting
Tools: Adobe Creative Suite, Sketch, Final Cut, Sketch Up, Wordpress, AutoCAD

Programming & Data Science

Web Development, Circuit Design, Geographic Information Systems (GIS)
Languages: Arduino, Python, Unix
 HTML, CSS, JS, Matlab
Tools: Sigmaplot, Origins Pro, ArcMap, ArcView

Fabrication

TH & SMT Soldering, Fiberglass, Property Fabrication, Faux Finishing, Carving, Woodwork, Arc Welding, Sewing, Bronze and Wax Casting

University of South Florida (Tampa, FL) M.S. Marine Science (Chemistry)**2014****Eckerd College (St Petersburg, FL) B.S. Marine Science (Biology)****2008****Global College: LIU-Brooklyn (Japan, India) B.A. Art and Asian Studies****2006**