MATTHEW DIAMOND

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EDUCATION

The University of Texas at Austin   Fall 2015
Bachelor of Science and Arts in Computer Science   Minor: German
Digital Arts and Media Certificate, Music Concentration   *GPA:* 3.41

WORK EXPERIENCE

Applied Research Labs at UT Austin – Austin, TX · *Engineering Scientist Associate*   Summer 2016 - present
- Write and maintain software that runs on GPS monitoring stations throughout the world and processes GPS navigation and observation data in real time with high reliability
- Write and maintain various analysis tools for working with GPS navigation and observation data

Rackspace Hosting – San Antonio, TX · *Product Development Intern*   Summer 2014
- Wrote a web application for calculating and presenting statistics related to internal issue tracking systems
- Improved an in-use web application for handling spam email and email blast prevention

Diamond Data Recovery – Austin, TX · *Owner, Technical Support*   Summer 2013 - December 2015
- Established an IT company in Austin
- Wrote and maintained a unique client and invoice database for management purposes
- Performed data recovery and reconstruction, as well as fixed miscellaneous computer problems

Bit by Bit Computer Consulting – New York, NY · *Technical Support*   Summer 2012 - Winter 2013
- Assisted a wide range of customers with troubleshooting and configuration for both Macintosh and Windows machines
- Served as an outside computer consultant for several sizable companies in the Manhattan area
- Wrote an application for automating website status checking to ensure reliable web hosting

Tekserve – New York, NY · *Retail, Technical Support*   Summer 2008 - Summer 2011
- Helped customers with Apple machines decide what hardware/software to purchase to accomplish their goals

PROJECTS

- **Modular Synthesizer:** Designing and implementing a digital signal processing application that allows the user to generate and manipulate waveforms however they choose, with the resulting signal output as audio, C++ and SDL2, this project is ongoing
- **TSBVI Coding Club:** Volunteering to help introduce a programming class at the Texas School for the Blind and Visually Impaired, working towards a curriculum tailored to blind students, this project is ongoing
- **Depth Camera:** Created a device and supporting software capable of recording 2.5D images (3D from a single viewpoint), Python and OpenCV, Fall 2014
- **Goldfish Tracker:** Wrote an application that utilizes two cameras to track a real goldfish as x, y and z coordinates, then renders its entire path in a 3D space, Processing, Summer 2014
- **PintOS:** Implemented many low level features of a basic operating system, including a process scheduler, system calls, virtual memory, and a file system, C, Spring 2014

TECHNICAL EXPERIENCE

- **Programming Experience:**
  - Proficient in: C, C++, Python, Java, Processing, Bash, Max/MSP
  - Familiarity with: HTML, PHP, JavaScript
- **OS Experience:** Expert in Linux and Macintosh environments, proficient in windows environments
- **Additional Software Experience:** MySQL, MSSQL, Git, Adobe Creative Suite, video editing software, music production software, SDL, SDL2

ADDITIONAL INFORMATION

- **Additional Education:** CIEE Study Abroad at IRCAM (Institute for Research and Coordination in Acoustics/Music), Paris 2015 (a course in Max/MSP)
- **Languages:** Fluent in English, basic knowledge in German
- **Interests:** Music, Audio, Graphics, Art, Digital Art