

# KATHRYN R. DIPIPPO

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Portfolio: [kathryndipippo.com](http://kathryndipippo.com)  
GitHub: [github.com/pepper-wood](https://github.com/pepper-wood)

## EDUCATION

RENSSELAER POLYTECHNIC INSTITUTE

Expected Graduation: May 2017

*B.S. Computer Science, Minor in Studio Arts*

*Technical skills:* Python, [C#, ASP .NET, MVC4], [HTML, JavaScript, CSS], SQL, Java, C++, Object-Oriented Programming, PaintTool SAI, Photoshop, GIMP, and Microsoft Office programs (Word, Excel, and PowerPoint)

## WORK EXPERIENCE

### SUMMER 2016, TALLAN SUMMER SOFTWARE CONSULTANT INTERNSHIP, BOSTON, MA

*Tallan provides technology and business process consulting services to enterprise and mid-sized companies*

- Designed and implemented a layout customization feature in their Virtual Tour internal program, which will be deployed to various clients such as the Massachusetts Legislature and Delaware Legislature
- Assisted in updating the Sessions, Hearings, and Special Events Video database at the Massachusetts State House

### SUMMER 2014 AND 2015, MID-INFRARED TECHNOLOGIES FOR HEALTH AND THE ENVIRONMENT (MIRTHE) INTERNSHIP

*Intern at Professor Claire Gmachl's optical laser laboratory at Princeton University*

- 2014: Designed and Implemented Graphical User Interface (GUI) and performed statistical analyses using MatLab; Presented abstract and poster entitled "Internal Mobilization of in vivo Glucose Sensing System" at MIRTHE Summer Workshop Conference
- 2015: Redesigned and presented Python GUI to be used at clinical trials in diabetic facilities in 2015; presented abstract and poster entitled "Python and GUI Implementation for Internal Optimization and Increased Usability of in vivo Glucose Sensing System" in 2015. MIRTHE is an NSF Engineering Research Center at Princeton University and five partner universities

### FALL 2015 - SPRING 2017, COMPUTER SCIENCE 1 MENTOR

*Assisted two 2-hour lab & office hour periods for Computer Science 1 for four semesters*

### FALL 2014, CALCULUS 1 MATH MENTOR

*Hosted weekly quiz block classes for first year students taking Calculus*

- Prepared and lead class for one hour each week; Gave and graded weekly quizzes and homework assignments
- Hosted office hours three times a week to answer calculus questions and offer college advice, 6 hours per week

## IMPORTANT PROJECTS

**Adoptapedia (HTML, CSS, PHP, SQL, JavaScript):** Designed and implemented a website that serves as a widely used online resource for character designers and artists. It consists of a MySQL database that updates itself daily, along with html pages to allow users to search and post to this resource. PHP is used to merge the front-end Html/CSS/JavaScript code with the PHP backend. I started this project in 2013 with Java and has since been rewritten into C++, Python, and its current form as a website. The application can be found live at <http://adoptapedia.com/>.

**SooshARPG (HTML, CSS, JavaScript, TaffyDB.js):** Designed and implemented a webpage that serves as a tracker for an online art-based roleplaying game for a character of mine. It uses a JSON database using TaffyDB.js along with JavaScript to generate helpful information, such as whether my character can craft recipes using ingredients in their inventory. Another feature is a Moderator Tools page, which contains helpful scripts for the game masters to quickly generate randomized outputs for daily character quests. The project will later be developed and released for others participating in the game with the aim of making the code easy to modify with little to no understanding of JavaScript or html. The application can be found live at <http://www.kathryndipippo.com/SooshARPG/>.

**Tiberius the Line Follower (C):** Assisted with programming a line following robot dubbed "Tiberius" using a Pololu sensor and an Arduino microcontroller. He placed first in a competition against other line followers in the Introduction to Engineering Design class, completing the expert course in 19 seconds.

## AWARDS AND RECOGNITIONS

Genericon Cover Art Contest Winner (2014, 2016, 2017); Code for Princeton Hackathon, 3<sup>rd</sup> Place (2015, see <https://github.com/codeforprinceton/ptonCycle> for the code's repository); Dean's List (2013); Rensselaer Leadership Award (2013-2017); Rensselaer RE:Design Scholarship Competition Winner (2013)

## PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS

IEEE, Joined Summer 2014 | SOCIETY OF WOMEN ENGINEERS, Joined Fall 2013 | WOMEN'S MENTOR PROGRAM, RPI, Joined Fall 2013

## VOLUNTEER EXPERIENCE & EXTRACURRICULAR LEADERSHIP ACTIVITIES

2014-2017	ARTIST ALLEY COORDINATOR FOR GENERICON, Anime, Science-Fiction, and Gaming weekend-long Convention at RPI
2015-2016	SOCIAL CHAIR OF ARDA, RPI Themed Housing for the RSFA, the Rensselaer science fiction and anime association
2002-2013	ST. PAUL'S CHURCH, PRINCETON, NJ: Hand Bell Choir (2002-13); Altar Server (2004-13); Youth Group (2009-13)
2006-2012	PRINCETON PUBLIC LIBRARY, PRINCETON, NJ: Summer Reading Program (2006-12); Teen Advisory Board (2010-12)