Gabriel Abraham Garrett

ggaabe@gmail.com • 631-478-3793 • github.com/ggaabe • website: ggaabe.github.io

EDUCATION

Stony Brook University — Coursework in Computer Science, English (Honors Program) — Dean's List, 2014-2015 SUNY Farmingdale — Coursework in Computer Programming, President's List, 2013-2014

PROFESSIONAL EXPERIENCE

Robotics Unlimited - Software Engineer - May 2016 - December 2016

- Developed multiple Augmented Reality applications using Vuforia in Unity to enable virtual toy customization.
- Developed iOS application in React Native to control standing tables via bluetooth.
- Developed three C# applications for iOS and Android in Unity to control multiple robots equipped with varying bluetooth communication hardware in real-time.
- Created simulator in Swift to model arm motion in 3D space in real-time using iPhone accelerometer data transmitted via bluetooth.

Connectomix - Chief Software Architect - November 2015 - April 2016

- Developed and designed website with login-system and personal user dashboards using Express and node.
- Used PostgreSQL to store custom user-data and load personal user-made items on their dashboard.

Nassau County Government — Web Developer — June 2013 - August 2013

- Utilized the AJAX and jQuery web development libraries, in combination with PHP.
- Used AJAX to create a live notification system for the Emergency Fire Services.
- Created CSS animations for the Land Record Viewer.

SKILLS

• C#, Java, JavaScript, Python, Vuforia Augmented Reality, Unity3D, Hololens Mixed Reality, React Native, React, HTML, CSS, Swift, Node.js, Express.js, Meteor.js, C++, PHP, MySQL, Bash

PROJECTS

OpenWorm Artificial General Intelligence Project – January 2015 - Present

- Developed algorithm to represent neural network that matched mapping of a roundworm brain to run on a robot.
- Mapped muscle neurons to motors, mapped touch sensing neurons to an ultrasonic sensor at the front of the robot.
- Broke down neuron firing into separate time states, allowing for a more perfect representation of the roundworm's brain, resulting in similar behavior between the robot and organic roundworm.
- Contributions here: github.com/Connectome/GoPiGo / www.youtube.com/watch?v=YWQnzylhgHc

Screenie — HackMIT 2015 Winner for best use of Visual Media

• Virtual Reality application built in Unity for the Oculus Gear VR headset. Allowed users to get useful, actionable information about objects in their simulated environment by simply looking at them.

WaterNY— HackNY 2015 Winner of Best Civic Hack

Hardware and machine learning hack that allows users to measure quality of water with a cell-phone compatible
microscope and assist city residents in submitting water quality complaints. Made using custom-trained Clarifai
image recognition model.

Worthwhile — November 2014

Made an iOS app to tell people how much time an item would cost each individual in terms of their own wage. The
app was written in Swift, with the aim to help people be more price-conscious when factoring in just how much of
their life they are spending when purchasing an item. itunes.apple.com/us/app/id1006859702

Rex Defense — January 2014 – January 2015

- Created and patented rifle grip
- Responsible for product prototyping and testing; managed multiple technical workers to create product; 3-D designers and manufacturers
- Identified demographics for viable consumer markets; Wrote provisional patent for product.

Cryptedge — December 2013 - February 2014

- Created first evaluation protocols for cryptocurrencies
- Protocols evaluated security of the cryptocurrency, potential to be a scam (high capitalization and low trading value, anonymity of creators), attributes of the currency, and likelihood of success for the currency (size of community, acceptance as tender, attitude/sentiments by the community on how to treat the cryptocurrency).
- Made a website where users can register and login, using PHP and MySQL.
- Identified database and login errors during this time, as well as how to correct them.

Article Writing, Yahoo! News. Medium, Jewish Post, Seeking Alpha — August 2013 — Present

- Wrote several articles for the Jewish Post, Medium, Yahoo! US News, and Seeking Alpha.
- Articles ranged in nature from personal, to sports history, to political to financial.

VOLUNTEER WORK

Setauket Fire Department — July 2014 – January 2015

 Volunteered with Setauket Fire Department as a firefighter; learned leadership and how to handle high-pressure situations