# Joshua Brow josh9051@gmail.com · joshbrown.info · DBis9051

## **Work Experience**

(concurrent with High School Studies)

## CMIT Solutions · July 2020 - August 2020

IT Security Intern

- Recommended to client, who suffered recent phishing incident, various cybersecurity solutions
- Reviewed and evaluated client needs and developed projection of costs to implement a corrective project
- Designed Excel matrix using pivot tables with advanced filter functionality to organize and compare products and service offerings

#### NYAAFF · February 2020 - Current

Web Developer

- Designed and developed a website for an advocacy organization
- Created a custom static site generator to transform data and templates into HTML

## Tamarack Tower · November 2019 - Current

Web Developer and Server Administrator

- Designed and developed web pages to enable the online purchase of event tickets and membership subscriptions
- Created a custom PayPal payment API wrapper to simplify donors' transactions
- Constructed and managed a Google Cloud Compute VM instance to host the website and to store donor data
- Managed MySQL databases containing donor information

## MacAndrews & Forbes Incorporated • July 2018 - August 2018

Cybersecurity Technician Intern

- Created and managed AWS Ubuntu and Windows instances
- Configured network security rules and identified irregularities using Sophos Central, and then worked with my team to mitigate
- Reviewed network logs and generated user activity reports using Palo Alto Networks Console

## Port Chester - Rve Brook Public Library March 2018 - Current

Web Developer and Server Administrator

- Developed web pages to facilitate donations and designed a database to store donors' form data
- Integrated the PayPal payment API to accept debit/credit cards, bank accounts, and PayPal accounts
- Set up and managed a Google Cloud Compute VM instance to host the web pages and to generate donor data reports
- Identified critical security concerns, e.g. integrating SSL/TLS certificates and auto-renewal scripts, and led a team mitigation effort

## **Projects**

## BitLink · April 2020 - Current

- Developed an open source and free video conference web application during the COVID-19 pandemic to help people stay connected
- Employed machine learning to implement live background replacement and background blur to protect users' privacy

## StackOverflow Chat Bot · May 2019 - Current

- Created a platform agnostic chat bot for communication in and administration of the StackOverflow JavaScript chat
- Integrated a three tier security method of executing and evaluating untrusted user inputted code on a server
- Built a plugin API to enable additions by other developers
- Documented the unofficial StackOverflow chat API to allow other developers to create their own bots

## **Skills**

- Node.js
- HTML/CSS/JS
- React/MobX
- TypeScript
- Relational Databases (MySQL, PostgreSQL)
- iQuery
- AWS and GCE VM management
- · Linux server administration
- · Microsoft Excel
- Adobe Photoshop, After Effects, and Premiere Pro

## **Education**

#### Blind Brook High School · Class of 2021

AP Computer Science, Honors Engineering, Engineering, AP Computer Science Principals (Self Taught), Robotics

## Purdue University · Summer Session 2019

Introduction To Systems Development (CNIT 18000)