TOMAS SEGED

linkedin.com/in/tomashseged | tomasseged.github.io | github.com/tomasSeged
thshgm@gmail.com | 571-361-8020

Skills

- Java | Python | Linux | HTML | CSS | JavaScript | C | SQL | MongoDB | MYSQL | Haskell | Lisp | Golang | Git | Docker | Kubernetes
- Data Structures | Object-Oriented Programming | Distributed Systems | SDLC | Unit Testing | Lambda | Full-Stack

Experience

IT Consultant Intern — **Loops Studios LLC** — *Ashburn, VA, USA* — **06/2022 - 08/2022**

- Participated in advising clients, implementing solutions, troubleshooting issues, and providing technical support.
- Worked in a team environment to solve problems and respond quickly to changing project requirements and customer needs.
- Create and modify SQL queries to efficiently retrieve data from a relational database.

Education

Bachelor of Science — **George Mason University** — *Fairfax, VA, USA* — **01/2021 - 12/2023**

- Major in Computer Science

Associate of Science — **Northern Virginia Community College** — *Alexandria, VA, USA* — **01/2019 - 12/2020**

- Major in Computer Science

Projects

- **WIFI-Controlled Race Car (Python | Linux | React)**
  - Collaborated with a team of 7 developers in designing and developing an award-winning remotely (WIFI) controlled race car using a BeagleBone Black single-board computer.
  - Designed and implemented the control steering via pulse width modulation (PWM) signals transmitted from the single-board computer to the steering servo.
  - Member of the Race Management Team that was responsible for providing a central interface, which consisted of a live video feed as well as live telemetry from a GPS sensor.
- **Full-Stack Web Application - Grocery Store Management System (HTML | CSS | JS | Python Flask | MYSQL)**
  - Developed and implemented a robust CRUD API for a full-stack grocery store management system, enabling Create, Read, Update, and Delete operations on product data.
  - Designed a relational database comprising four essential tables to efficiently manage data. Ensured data integrity and optimized query performance through normalization and indexing strategies.
- **AI Poetic-Text Generator (Python)**
  - Designed, developed, and trained a recurrent neural network (Long-Short-Term-Memory) using TensorFlow to generate Shakespearean texts based on input prompts.
- **Network Scanner Web-App (Linux | Apache | nmap)**
  - Developed and implemented a web-based network scanning project, enabling the creation of a user-friendly network scanner accessible via a web browser.
  - Utilized a Cron Job scheduled every 10 minutes to trigger the nmap tool, conducting network scans and recording and recording the results in a text file.
  - Implemented a PHP file to format the text output, and render the results in a web browser.
- **Website Health Checker (Golang)**
  - Engineered and implemented an API dedicated to monitoring the health status of websites.
  - Developed functionalities to assess and report on the operational status of a website, delivering real-time responses indicating whether the site is currently running or experiencing downtime.
- **DHT11 Humidity Temperature Sensor (C++ | Arduino)**
  - Designed and engineered an ESP32 based project for monitoring temperature(0°C to 50°C) and humidity(20% to 80% RH) using a DHT11 sensor.
  - Implemented LCD display functionality for immediate data visualization.

Mentorship

- **Computer Science Tutor:** Programming | Data Structure and Algorithms | Career Advice | Coding Interview Prep | Professional Portfolio