LinkedIn
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WORK EXPERIENCE

Freelance Software Developer   **Qt Open Source**   **Sep 2019 - Present**

Qtwebkit
- Ported most parts of Platform Integration Layer like Process spawning, Network Fetching threads, Bitmap drawing using Qt APIs. Ported Webkit tests to benchmark and diagnose Qtwebkit.
- Configured GitHub actions for building Qtwebkit across multiple platforms and Travis for QA Testing (YAML).
- Wrote python scripts for downloading qt binaries for CI and automated build process.

Student Developer   **Google Summer of Code 2019**   **Apr 2019 – Nov 2019**
- Implemented Download to Folder options in Web positive (A Browser written in C++ for Haiku).
- Ported Webkit to Haiku. Worked with two large and complex code bases, making major changes to Haiku-Webkit library by implementing required components.
- Replaced the multi-thread network model with a single thread per request within Haiku's Network Manager.

Research Intern   **IIIT Design and Manufacturing**   **May 2018 – June 2018**

Automating Detection of fabric flaw
- Implemented Transfer Learning with COCO Model, alongside edge detection algorithms to detect loops and other stains present on fabric using OpenCV and TensorFlow.
- Optimized model efficient enough to run on Raspberry Pi.

Testing Engineer and Analyst   **VIT Chennai**   **May 2017 – May 2018**

VPROPEL (VIT Programming Portal for Enhanced Learning)
- Performed Automated Functional Testing using Selenium.
- Performed Analysis using Kibana and Elastic Search (ELK Stack) to detect plagiarism.
- Created a specific browser shell using CEF (Chromium Embedded Framework) to prevent tampering the site with custom extensions.

ADDITIONAL EXPERIENCES

Student Mentor   **Google Summer of Code 2020**   **Apr 2020 - Present**

Input Preferences
- Mentoring a student project that aims at creating settings configuration for various hardware devices.

Event Coordinator   **Spoken Tutorial, IIT Bombay**   **Apr 2020 – May 2020**
- Mentored professors from all over India and helped them learn various programming languages like (Ruby, Java, Python and C++) alongside setting problems to test their learnings from the course.

Student Mentor   **Google Code In 2019**   **Dec 2019 – Jan 2020**
- Mentored High School students to complete various tasks ranging from easy to hard with Haiku and choose the best contributor for the grand prize sponsored by Google.

Student Mentor   **NJACK, IIT Patna**   **Sep 2019 – Jan 2020**
- Mentored 3 students to work on one of my open-source projects (JS-OS), which involved reviewing the student's code.

EDUCATION

Chennai, India   **Vellore Institute of Technology**   **May 2017 – Present**
- B.Tech. in Computer Science. GPA: 9.4/10.0 (3.76/4).
- Undergraduate Coursework: Operating Systems; Databases; Algorithms; Programming Languages; Comp. Architecture; Calculus; Artificial Intelligence; Machine Learning; Object-Oriented Software Development;

TECHNICAL EXPERIENCE

Personal Projects
- **Attention Span Detector** (2020). An app to monitor user's attention during a course using Pose Net. JavaScript, Json, P5.js, Tensorflow.js, Geometry.
- **Digit Recognizer** (2020). GUI app that allows to draw and predict using CNN. Python, Kivy, TensorFlow
- **Physics Engine** (2019). Simple Force Simulator on standard objects. OpenGL, CUDA
- **JS-OS** (2018). The Operating system on the web that offers the same UI across all platforms, able to resume from the state. Web Sockets, Node.js, MongoDB, React
- **Personal Assistant-Friday** (2017). Perform automation tasks based on speech, analyze feelings based on context and offer Advice. Python, TensorFlow
- **QA Site** (2017). A Node powered web site to ask and answer. Django, MongoDB
- **Predictive Keyboard** (2017). Predictive Keyboard using Suffix Tree and Bayesian Network, done using Marshaling. C++, C#, WPF

Open Source
- **Engnr** (2020). Rewrote the qt downloader script to extend its capabilities. Python, Bash
- **GeoPuzzle** (2017). Fixed Typo, and few build issues. Python, Django
- **LIBRE HEALTH EHR** (2017). Added Dropdown feature and some code refactoring. PHP

ACHIEVEMENTS

- Completed **Google Summer of Code 2019** with Haiku, Inc. Selected out of 12k students globally.
- Completed **HacktoberFest 2019**. Made 5 contributions to an open-source project within 2 days.
- Paper Presentation on Suffix Trie in an **International Conference (2019)** held in VIT.
- Runner up in **2x10 Relay Coding Contest (2019)** out of 100 participants.
- Winner **International Language Day Hackathon (2017)**. Made a game to teach German within 24 hours.
- 10th place out of 150 participants in Top Coder Open 17 held in Bangalore. (2017)
- Secured 7th Rank among ~2000 students in VIT, in 1st year. (2017)
- Cleared **Zonal Computing Olympiad** and advanced to INOI. (2015)
- AISSCE grade 12 - **First rank student** in 4 electives in Science Group; Subject topper in chemistry; Second best project in Computer Science; Highest aggregate English, Math and Computer Science. (2015)

TECHNOLOGIES

- **Programming Languages:** C++ (Proficient), C (Intermediate), Python (Intermediate), SQL(Intermediate), JavaScript (Intermediate), PHP (Intermediate), Bash (Basic), Java (Basic), C# (Basic)
- **Frameworks:** MERN Stack (MongoDB, Express.js, React.js, Node), Meteor.js, Bootstrap, Less, Factory Boy, React Native, Selenium, Qt5
- **DevOps:** Git, Kibana, Elastic Search, Travis CI
- **Advanced Programming:** C++/C# CLI, CUDA, CMAKE, ASM
- **Libraries:** Tensorflow, Keras, Boost, OpenCV, NLTK, OpenMP, MPI
- **Software:** Adobe XD, Adobe Photoshop, Adobe Premiere Pro, Adobe After Effects, Unreal Engine 4, Unity, Blender (Basic Exposure – can work with all)
- **Documentation:** Word, Markdown, Latex