

RAHUL SUNDARESAN

✉ rahul@rsun.dev

☎ (980)-255-0390

🌐 <https://rsun.dev>

🐙 <https://github.com/rahul-sundaresan>

EDUCATION

M.S. Computer Science

University of North Carolina at Charlotte

📅 2019–2021

📍 Charlotte, North Carolina

B.Tech Computer Science

SASTRA University

📅 2015–2019

📍 Thanjavur, India

SKILLS

Programming

Python LaTeX Java (Android Development) Javascript
CSS HTML Node.js

Tools and Libraries

React React Native Software Defined Networks (SDN)
Gatsby Git REST APIs IPv6 Mininet Plotly
pandas react-d3-graph GitHub Actions
Agile Development Google Cloud Functions Firebase
Wireshark TCP/IP Linux/UNIX
Windows Subsystem for Linux (WSL2)

PROFESSIONAL EXPERIENCE

Full Stack developer (Part time)

ING

📅 March 2021–Current

📍 San Francisco, California

- Implemented features in the company's flagship app using React Native
- Built REST APIs using Google Cloud functions which are consumed by the app
- Architected sequence diagrams for the design of the app using Miro
- Built a location based search engine using a custom built implementation of Geohashes and programmed a search filter using Dice's Coefficient
- Wrote Unit tests using Jest to verify and validate functionality
- Stack: React Native Firebase Google Cloud functions
Node.js JavaScript Miro

Research Assistant

University of Nevada at Las Vegas

📅 June 2020–August 2020

📍 Las Vegas, Nevada

- Collaborated with Dr. Yoohwan Kim and Dr. Ju-Yeon Jo in researching the effectiveness of Multipath TCP in improving TCP throughput.
- Deployed network simulations to measure the throughput under varying latency and loss rate for Singlepath and Multipath TCP networks.
- Processed the output of iperf3's JSON results and graphed the data to visualize trends in throughput.

Stack: Python Mininet Plotly pandas

Software Engineering Intern

Capgemini Technology Services (Storage and Infrastructure team)

📅 November 2017–December 2017

📍 Bangalore, India

- Augmented an in-house software with features to automate system administration tasks.
- Implemented automated sign-in between Rundeck and the in-house software which bolstered the security of the application.
- Stack: PHP Rundeck

Software Development Intern

Perpetuuiti Technosoft

📅 November 2016–December 2016

📍 Chennai, India

- Built a GUI application that tracked changes to files and recreated the differences which was used as a part of their Backup Software portfolio
- Stack: Windows API C++ CBFS Filter

Network and System Administrator (on Contract)

Pat & Venky

📅 January 2018–Current

📍 Chennai, India

- Decommissioned an aging Windows based fileshare system and deployed a NAS for collaboration which drastically improved productivity and security.
- Configured fileshares with access based controls preventing unauthorized access to proprietary business data.
- Deployed a backup strategy which increased business data resiliency.
- Set up separate VLANs, creating a secure and faster network which increased employee performance
- Set up a cloud hosted Unifi controller on google cloud platform (GCP)
- Configured appropriate firewall policies for the VM to allow for centralized deployment of future sites and reduce CAPEX costs.

PROJECTS

Website Portfolio

- Built a personal website using Gatsby with CI/CD on Netlify.
- The PDF resume on the site is written in \LaTeX and generated with GitHub actions
- The website automatically integrates the latest version of the resume whenever a commit is made to the \LaTeX repository using GitHub Actions.

Teammaking

- Developed a full stack application that generates teams based on a survey.
- Collaborated with other developers following an agile development methodology and built using React, Node and MySQL.

Network ranger

- Refactored the code base and code reviewed a Discord bot that manages user roles and permissions in a discord server.
- Optimized a docker workflow to prevent a security breach.

Agency spotter scraper

- Designed a pipeline to scrape the agency spotter website using Python's BeautifulSoup library and a bash script.