

SAJAN JAI GUTTA

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EDUCATION

University of Southern California, Viterbi School of Engineering - Los Angeles, CA

August 2018

B.S. in Computer Science and Business Administration

- *Expected graduation May 2022; Cumulative GPA: 3.89; 4.0 major GPA; 4.0 every semester except Freshman year, first semester*
- *Honors: Viterbi Top Scholars Award + Scholarship, USC Presidential Scholar, Honors student, Dean's List every semester*

GITHUB:

You can view my personal Github portfolio in the repository at <https://github.com/sjgutta/sjgutta-personal-portfolio>.

- Link will not work yet since the repo is private. Email me your github info and I can add you as a collaborator to view it.

WORK EXPERIENCE

Discotech Backend Developer (more information on Github)

August 2019-Present

- Developing innovative technologies on the backend of Discotech's application to create competitive advantages
- Designed and implemented machine learning based event recommendation system, implemented event review prioritization system, built Python tool to apply mass updates to Discotech's Wordpress site, migrated code base to Python 3, developed object-oriented redirect system, implemented venue popularity system, integrated Firebase for tracking user interactions in the app, and more.

Northrop Grumman Software Development Intern - Redondo Beach, CA

May 2019 - August 2020

- Software Development Intern in Summer 2020 working on AEHF program with secure satellite communications.. See projects below.
- Team Lead for 11 interns in Explore Aerospace 2020 event. Earned Best Overall award out of 35 teams of interns.
- System Engineering Intern in Cybersecurity for Summer 2019: Earned Top Performer award. Information about projects is below.

Discotech Marketing/SEO + Web Development Intern

November 2018 - August 2019

- Facilitated new client onboarding process, implemented 130+ venues into Discotech system, created web pages and content for SEO

USC Marshall Business Student Government Senior Advisor, VP, Head of Professional Affairs

Spring 2019 - Present

- Senior advisor for 2020 school year, VP in 2019 school year, and associate for Professional Affairs committee in Spring 2019
- Coordinate workshops and events on campus for students' professional growth, manage and utilize corporate relationships within Marshall Business School (e.g. Marshall corporate contacts database, KPMG case competition, updating Marshall's career database)

Marketing/Management Intern for Dermatology practice - Melbourne, FL

May 2018 - August 2018

- Managed Wordpress updates, page creation. Directed video production (8 finished pieces) for social media. Managed medical and financial/health insurance records, performed inventory reconciliation

PROJECTS

Northrop Grumman Advanced EHF On-Orbit Test Suite

Summer 2020

- Developed a full test suite for executing satellite crosslink configurations and testing for radiometric data. Most details are classified.
- Over 4000 lines of code in python and XML, complete with Tkinter GUI and robust subprocess management system.
- Provided my GUI design as a template for future NG engineers to use, per request of managers.

Northrop Grumman Command Constraints Parser

Summer 2020

- Implemented an object-oriented parsing system for converting database constraints and command information into constraint files in postfix notation to be run on the payload for a classified NG program.

Northrop Grumman STIG Tracking Tool

Summer 2019

- Developed a tool to standardize and automate system security STIG assessments and reporting that was adopted company-wide
- Stores and analyzes assessment data, identifies vulnerabilities in NG systems, and generates workflows for cybersecurity engineers
- Reduced reporting process from 60+ hours to less than 5 minutes. Allows increased scope of assessments and accurate risk mitigation
- Built using Python, MS SQL Server, and SQL. Documented using UML and pydocs.

Northrop Grumman Communications Database

Summer 2019

- Developed a communications and employee resource management database in MS Access for the NG Cybersecurity Division
- Database identifies the skills of each employee, determines best fits for open positions, reports management and sector changes, and automatically notifies all employees of these changes. Detailed reports are automatically generated for management each month.

Cat/Dog ML Image Classifier in Tensorflow (on my Github)

Summer 2020

Boeing Case Competition at USC (2nd place)

- Made key decisions to maximize profitability of an upcoming aircraft model, performed a cost-benefit analysis, determined an aftermarket strategy, implemented a production and spares provisioning plan, and presented the plan to a group of Boeing executives

SKILLS AND INTERESTS:

On-Campus Organizations: USC Sports Business Association, USC Sports Analytics, Club Tennis, USC Association for Computing Machinery

Languages: Python, Java, C++, C, LabView (G), Perl

Web Design: HTML, CSS, Bootstrap, JSP, Java Servlets, Javascript, jQuery, AJAX, Jinja templates, WTForms, MVC Model

Relational Databases: SQL, MySQL, Peewee ORM, JDBC, MS SQL Server, pyodbc, UML

APIs: Google Maps API, Google Calendar API, Google OAuth2 and Sign-in API, Yelp Fusion API, Wordpress API

Web Scraping: Scrapy library in Python, Jaunt Library in Java

Other: Tensorflow + Keras, pandas, numpy, Unit testing with pytest, flask, flask-admin, pydocs, WordPress, Visual Basic for Applications