Sudhan Chitgopkar

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EDUCATION

University of Georgia — Aug 2019 - May 2023
(B.S) Computer Science, (B.A) International Affairs — *GPA: 3.98/4.00*
Recognitions: Dean's List, Presidential Scholar, TEDx Speaker, Summer Research Fellow
Awards: Outstanding CS Undergrad (top 0.3% of class), Gold Presidential Service Award

EXPERIENCE

Amazon — May 2022 – Present
Software Engineering Intern — *Seattle, WA*
- Creating an AWS application to automate load-shedding protocols on a tier-1 customer service
- Developing a Lambda function in Java to query internal monitoring APIs for system health analysis, notifying teams of platform duress using AWS SNS, and storing metadata in DynamoDB audit logs

Southern Company — May 2021 – May 2022
Technology Solutions Intern — *Atlanta, GA*
- Developing a Python script for DNS, IP, and WhoIs data analysis on 50+ domains to identify a threat actor causing $750,000+ in damages
- Briefing federal law enforcement agencies (i.e. FBI, Secret Service) on data patterns
- Designed and developed a dashboard for documentation version control of 50+ nuclear software applications.

University of Georgia — Aug 2020 – Dec 2021
Teaching Assistant — *Athens, GA*
- Assisted 35+ students with Theory of Computation coursework 3 times per week
- Taught and solved problems involving finite automata, decidability, and Turing machines
Research Fellow
- 1/30 students awarded a grant to conduct 340+ hours of intensive, faculty-mentored research
- Derived a mathematical model for Bayesian Network data tuning using DNA sequencing algorithms

LEADERSHIP & INVOLVEMENT

Small Satellite Research Lab — Apr 2021 – Present
Software Engineer — *NASA Ames*
- Developing core flight software in C++ using NASA F' for cube-satellite project: MEMESat-I
- Automating satellite command execution testing using Python scripts interfacing with telemetry libraries

UGAHacks — May 2021 – May 2022
Director — *Major League Hacking*
- Led 7 undergrads in garnering $30,000+ in funding to host UGA's flagship annual hackathon
- Coordinated with 50+ representatives across 14 companies to host 12+ workshops over 48 hours

Franklin Residential College — Aug 2021 – May 2022
Director's Assistant — *Univ. of Georgia*
- Managed 10+ board members in hosting 2 weekly academic & service events for 96+ members

PROJECTS

JADE | *C, C++, OpenGL, SDL* — Jan 2022 – Present
- Developed a graphics engine from scratch with support for 2D and 3D rendering
- Used for mathematical visualization of fractal generation, modular multiplication, and cellular automata

Swarm Sense | *Java, Processing, Python, Jupyter Notebook* — May 2018 – May 2020
- Created a genetic algorithm from scratch to breed competitive co-evolution in Boid flocks
- Conducting data analysis on flock performance using Jupyter Notebook

TECHNICAL SKILLS

Languages: Java, C/C++, Python, BASH, PHP, SQL, HTML + CSS, Javascript
Frameworks/Libraries: Bootstrap, SDL, DEAP, Processing, P5.js, OpenGL
Dev Tools: AWS Lambda, DynamoDB, Emacs, *nix Systems, Shell, Figma, Git, LaTeX, CI/CD