# 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 to query internal monitoring APIs for system health analysis, notify teams of platform duress, and store data in DynamoDB

**Southern Company**                                                                                                   May 2021 – Present
*Technology Solutions Intern*                                                                                              *Atlanta, GA*
- Analyzing DNS, IP, and WhoIs data on 50+ domains to identify actor causing $500,000+ 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