# Sudhan Chitgopkar

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## **EDUCATION**

Harvard University May 2024

(M.S) Computational Science & Engineering

Concentration: Computational Economics, Game Theory

University of Georgia

May 2023

(B.S) Computer Science, (B.A) International Affairs

GPA: 3.99/4.00

Recognitions: Summa Cum Laude, TEDx Speaker, Presidential Award (top 0.1% of class), Undergrad Commencement Speaker, 2023 Engineering Excellence Award (top 1 CS student)

## Experience

May 2022 - August 2022 Amazon

Software Engineering Intern

Seattle, WA

Atlanta, GA

Athens, GA

- Designed & implemented a serverless load-shedding automation application on amazon.com's data-store
- Decreased system duress notification time by >90\%, increasing uptime during peak traffic
- Assisted in scaling-up and maintaining servers during Prime Day 2022

Southern Company

May 2021 - May 2022

Threat Analyst • Primary analyst on a \$1.2M+ data-driven financial fraud case (ask me about this!)

- Developed a case for the Assistant US Attorney's office, FBI, and Secret Service from personal findings
- Analyzed 1000+ IP addresses & WHOIS registrations to help identify an international threat actor

## University of Georgia

Aug 2020 - Dec 2021

Teaching Assistant • Assisted 35+ students with Theory of Computation coursework 3 times per week

• Taught and solved problems involving finite automata, decidability, and Turing machines

- 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

**SolveUGA** Aug 2022 - May 2023

Founder, President

Software Engineer

Univ. of Georgia

- Founded UGA's flagship computational problem-solving team with 200+ members and 2 faculty
- Leading weekly discussions on algorithmic complexity and optimization problems
- · Solving and teaching various toy-problems in computer science and math to undergrad and grad students

## Small Satellite Research Lab

Apr 2021 - May 2022 NASA Ames

• Developing core flight software in C++ using NASA F' for low-earth-orbit cube satellite, MEMESat-1

· Automating satellite command-execution-testing using Python, telemetry libraries, and ground station APIs

**UGAHacks** 

Director

May 2021 - May 2022 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

## Projects

Serene (BlackRock Challenge + UGAHacks 8 Winner) | React, HTML/CSS, Plaid

Feb 2023

- · Dynamic portfolio management tool utilizing demographic data and market volatility rates
- $\bullet\,$ 1st place winner, BlackRock Hack challenge, 2nd place winner, UGAHacks $8\,$

**Jade**  $\mid C, C++, OpenGL, SDL$ 

May 2022

- 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

## Evolutionary Playground | Python, DEAP

Dec 2021

- Developed a series of evolutionary computation programs to solve optimization and root-finding problems
- Solved various NP-complete (i.e. n-Queens) and NP-hard (i.e. Traveling Salesman) problems

## 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, IATEX, CI/CD