

# Shubha Swarnim Singh

Boise, Idaho | shubhaswarnimsingh@gmail.com | +1 986 666 3464 | LinkedIn | GitHub

## Education

**The College of Idaho**, Computer Science and Business Administration August 2022 – May 2026

- Dean's List, Honor's GPA: 3.74/4.0

## Projects

**Senate Voting System** GitHub

- Engineered a full-stack online voting app using Node.js, Express, and SQLite, ensuring real-time vote processing and fault-tolerant infrastructure.
- Designed a scalable WebSocket-based architecture for instant vote updates, maintaining 99.99 percent system uptime under high concurrency.

**In-Memory Search Engine** GitHub

- Developed a high-performance in-memory file system search engine in Python that indexes and searches text files with sub-millisecond query times.
- Implemented recursive directory crawling to parse .txt files, building an efficient word-based inverted index.

**Investment Calculator** GitHub

- Analyzed 2,500+ NASDAQ stocks to identify those with a 10+ year uptrend.
- Designed an algorithm to support consistent, data-driven investment decisions.

**3D Model for Dorms** In Progress

- Creating a 3D model for dorms in our college using Node.js, JavaScript, and Blender and collaborating with the IT department to integrate it into the official college website. The project is designed for over 800 students at the College of Idaho.

## Experience

**IT Intern**, College of Idaho Dec 2022 – May 2024

- Deployed MFA on 1,000+ devices, achieving 90% success with secure token validation.
- Maintained biological species database with 1M+ records.

**Alumni & Events Technician**, College of Idaho Dec 2022 – Present

- Provided technical support at major alumni events, including a \$1.12M fundraiser.
- Enhanced alumni database for better outreach.

## Leadership

- **ASCI Treasurer (2024-Present) & Senator (2022-2024)**: Managed \$100K budget, ensuring effective fund distribution and financial transparency; previously served as a Senator.
- **Consul, Sigma Chi (2025-2026)**: Led the fraternity, overseeing operations and brother development.
- **Resident Assistant (2022-Present)**: Built inclusive community, resolved conflicts, and mentored peers.
- **President, Boxing Club (2023-Present)**: Restarted and grew the club and built a supportive fitness community.

## Technical Skills

**Programming Languages**: Python, JavaScript, PHP

**Web Development**: HTML/CSS, Bootstrap, Websocket

**Frameworks**: NodeJS, ExpressJS, AngularJS, Flask

**Databases**: SQL, SQLite3      **Version Control**: Git/GitHub