110 N Bedford Apt 703 Madison WI 53703

# TANMAY BAGARIA

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#### **SELECT PROJECTS**

- Calorie Counter (2019). Created a mobile application with user authentication which allows them to keep track of their daily calorie usage and update their fitness goals. React-native, JavaScript, RESTful API
- Farm Excess (2019). Developed a web-based application which allows farmers to enter details about their excess produce and local community members to get customized recipes based on nearby farm surpluses. Node.js, HTML, CSS, JavaScript, Java, Python, Beautiful Soup, Google Distance Matrix API, Geocoding API
- Flood Watch (2019). Developed a web application which alert residents to possible flooding in the near future based on their location and elevation with a danger score. React, JavaScript, Bootstrap, HTML, Sass, Flask, Amazon EC2, Amazon DynamoDB, Python, Mapbox API, Dark Sky API, Jawg API
- **Heap Allocator** (2019). Designed a heap allocator from scratch which uses the best fit placement policy with splitting and coalescing for the allocation of memory. **C**
- **Chain-Voting** (2018). Created a decentralized blockchain voting system with user authentication for simultaneous usage using Python TCP server sockets, firebase and multi-threading. **Python**

#### **EDUCATION**

### Madison, WI University of Wisconsin-Madison

May 2020

- B.S. in Computer Science with Minor in Entrepreneurship, May 2020. Cum. GPA: 3.90.
- Undergraduate Coursework: Information Security; Building User Interface; Operating Systems; Introduction to Artificial Intelligence; Algorithms; Data Structures; Computer Architecture; Compilers; Data Science; Computer Organization and Programming; Introduction to Computer Engineering; Java Programming; Linear Algebra

#### **EMPLOYMENT**

#### **Undergraduate Peer Mentor**

**UW** - Madison

Jan 2019 - Present

- Courses: Introduction to Artificial Intelligence (x3), Systems Programming (x2), Algorithms.
- Held office hours, review sessions and developed practice problems to help students in their coursework.

### **Undergraduate Researcher**

### **UW-Biochemistry Department**

Jan 2019 - May 2019

- Attempted to create clustering algorithms for the interaction of high dimensional proteins using C++ and the MSL Library.
- Researched and consolidated information relating to the homodimer universe.

# **Network Application Staff**

# Division of IT, UW - Madison

Sep 2018 - Dec 2018

- Worked on the knowledge base using HTML to store university information.
- Coordinated with different departments to arrange meetings and installation requests for campus VoIP phone systems.

### Marketing, Intern

#### **Zomato**

May 2018 - Jun 2018

- Led the marketing team to visit 20 commercial enterprises to pitch and expand the client base in the corporate sector.
- Researched on corporate and college target audience and maintained excel sheets of daily performance growth using periscope data.

#### **Financial Software Development, Intern**

# **SREI Infrastructure Finance Limited**

May 2017 - Jun 2017

- Developed regression analysis composites, binomial model, Black-Scholes model for premium option pricing using Java and Microsoft Excel.
- Researched and analyzed on computational finance and its benefit for the company on a national scale.

### Awards

- Best use of Google Cloud Platform (2019): Awarded at MinneHack, MN for Farm Excess out of 120 participants.
- Best use of JavaScript (2019): Awarded at HackUlowa, IA for Flood Watch out of approx. 100 participants.
- Scholarship for Summer Study (2019): Received a \$1000 scholarship given to high-achieving students based on academic performance.

### **Languages and Technologies**

- Java, Python, C, C++, JavaScript, React, React Native, Bootstrap, JQuery, Node.js, HTML, CSS, Sass, Pytorch, SQL, x86, Matlab, JUnit, TestNG
- · Visual Studio, Eclipse, Postman, XCode, Adobe Illustrator, Figma, Adobe XD, Adobe Photoshop, Microsoft Excel