110 N Bedford Apt 703 Madison WI 53703

TANMAY BAGARIA

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EMPLOYMENT

Undergraduate Peer Mentor

UW-Madison

Jan 2019 - Present

- Courses: Introduction to Artificial Intelligence (x2), Systems Programming, 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 over 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.

Finance and Software, Intern

SREI Infrastructure Finance Ltd

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.

EDUCATION

Madison, WI

University of Wisconsin-Madison

May 2020

- B.S. in Computer Science with Minor in Entrepreneurship, May 2020. Cum. GPA: 3.85.
- Undergraduate Coursework: 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

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**

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, Bootstrap, JQuery, Node.js, HTML, CSS, Sass, Pytorch, SQL, x86, Matlab
- Visual Studio, Eclipse, XCode, Adobe Illustrator, Adobe Photoshop, Microsoft Excel