# TANVIE K. KIRANE

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#### **EDUCATION**

The State University of New York at Buffalo Bachelor of Science, Computer engineering Minor in Mathematics

May 2022

Vikhe Patil Memorial School, Pune, India

93%

May 2018

## **RELEVANT COURSEWORK**

Intro to CSE I (Python, JavaScript), Intro to CSE II (Scala), Circuit analysis (Multisim), GPA: 3.7 Systems Programming (C), Digital Systems (Verilog, EDAPlayground), Data Structures (Scala)

### **ENGINEERING PROJECTS**

Real time MMO game: Pixel Wars

(Spring 2019)

- ❖ Built a real-time MMO in HTML, Scala, JavaScript, along with a server.
- Real-time score updates plus simultaneous desktop and web-browser compatibility.

Traffic signal sensor design:

(Spring 2020)

- ❖ Performed an excellent blend of theory and practical designing of a sensor at the intersection between a highway and a country road, taking into account minute weather changes too.
- Consolidated results into project documentation including design problem identification and state diagrams through excitation equations and supporting Verilog code.
- Verified the resultant outputs using TestBench in Verilog.

# **LEADERSHIP EXPERIENCE AND ACTIVITIES**

Intro to CSE II Undergraduate Teaching Assistant

(Fall 2019, Spring 2020)

- Conducting labs, grading quizzes and exams, host office hours, take student interviews,
  observe performance of students and schedule 1-on-1 meeting with ones needing extra help.
- Helped design a new programming assignment "Recommendations: using immutability"
- Additionally, contributed in designing a new homework: "Microwave: with no control flow"
- Undergraduate Research Assistant under Dr. Jenn Winikus (UB SEAS Dept.)

(Spring 2020)

- Imbibe interest of SEAS majors in school-aged children
- Plan a layout of science activities for them to perform and learn basic science and tech concepts through experiments
- Co-founder and board member at UBDivTech (Diversity in Tech club at UB)

(Fall 2018- current)

- Embraces diversity and inclusion in Tech at UB, motivates a diverse community and creates awareness about opportunities, conferences and scholarships
- Volunteer at Girls Scouts (WNY, 2018), Akansha org and Goonj Foundation (India, 2016-17)

#### **TECHNICAL SKILLS**

- Computer skills: Previous experience of coding in Scala, C, BlueJ, NetBeans, JavaScript, HTML, Python, Verilog, MySQL, MS Office: Word, Excel, PowerPoint
- Experience in designing circuits using Multisim, building complex circuits on breadboard when given function equations, and verifying them using Verilog code in EDAPLayground software.

#### **HONORS AND AWARDS**

University Honors Scholar

(Spring 2020 - current)

UB's Presidential Scholarship awardee

(Fall 2018, Spring 2019, Fall 2019, Spring 2020)

UB Dean's List

(Fall 2018, Spring 2019)