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

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

❖ *Traffic signal sensor design:*   *(Spring 2020)*
  o 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.
  o consolidated results into project documentation including design problem identification and state diagrams through excitation equations and supporting Verilog code.
  o verified the resultant outputs using TestBench in Verilog.
❖ *Real time MMO game: Pixel Wars*   *(Spring 2019)*
  o built a real-time MMO in HTML, Scala, JavaScript, along with a server.
  o proficient of real-time score updates and simultaneous desktop and web-browser compatibility.

LEADERSHIP EXPERIENCE AND ACTIVITIES

❖ *Academic Assistant: paraprofessional at Campus Living*   *(Fall 2020 - current)*
  o set and hold a minimum of 10 office hours per week for residents
  o organize study sessions based on the needs of residents in the living learning community
❖ *Intro to CSE II Undergraduate Teaching Assistant*   *(Fall 2019 - current)*
  o 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.
  o helped design a new programming assignment "Recommendations: using immutability"
  o contributed in designing a new homework: *"Microwave: with no control flow"*
❖ *Undergraduate Research Assistant under Dr. Jenn Winikus (UB SEAS Dept.)*   *(Spring 2020)*
  o inculcate interest in STEM majors in school-aged children
  o plan a layout of scientific experiments for K-12 students to perform and learn basic science and tech concepts
❖ *Co-founder and Public Relations chair at DivTech (Diversity in Tech club at UB)*   *(Fall 2019 - current)*
  o embraces diversity and inclusion in Tech at UB, motivates a diverse community and creates awareness about opportunities, conferences and scholarships
❖ Volunteer at Girls Scouts, and Akansha org and Goonj Foundation   *(2016 - 2018)*

TECHNICAL SKILLS

❖ Computer skills: HTML, CSS, Python, Scala, Java, C, NetBeans, JavaScript, Verilog, MySQL, SQLite, MS Office: Word, Excel, PowerPoint
❖ Experience in designing encoders, decoders, and other circuits and verifying them using Verilog code

HONORS AND AWARDS

❖ University Honors Scholar   *(Spring 2020 - current)*
❖ UB's Presidential Scholarship awardee   *(2018-19, 2019-20, 20-21)*
❖ UB Dean's List   *(Fall 2018, Spring 2019)*