

SANCHIT BATRA

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EDUCATION

University at Buffalo, The State University of New York

Bachelor of Science, Computer Science | Minor, Music Performance

Anticipated May 2020

GPA: 4.0/4.0

WORK EXPERIENCE

University at Buffalo, Department of Mechanical Engineering

Research Assistant, Motion Simulation Laboratory

May '18 - Aug '18

Building a virtual model of UB's North Campus using Unity to conduct research on autonomous vehicles

University at Buffalo, Department of Computer Science

Teaching Assistant, CSE250

Aug '18 - Present

Led recitations and conducted office hours for a course on data structures

Teaching Assistant, CSE199

Aug '17 - Dec '17

Assisted in recitations and mentored students in a seminar on the internet

University at Buffalo, Math Place

Tutor

Sep '17 - Present

Worked one on one with students to assist them in understanding critical mathematical concepts

PROJECTS

Web Development

- Aided in the development of UBHacking's official website by implementing a UI for managing FAQs and designing the authentication pages *Bootstrap, HTML, CSS, Python, Flask*
- Developed an unofficial lost and found website for my college *Bootstrap, HTML, CSS, PHP, JavaScript*
- Constructed a website for Roseate Engineering Services *Bootstrap, HTML, CSS, PHP*
- Created a personal website as a project for my seminar *Bootstrap, HTML, CSS*
- Wrote a script to bypass the (annoying) login procedure for obtaining access to UB's course management website *Python, Selenium*

Software Development

- Led the development of a fractal visualization software in a team of three *Java*
- Coded a relatively elementary HTML validator *C++*
- Built a tile-matching game similar to Candy Crush by applying principles of good software design, the observer pattern, model-view separation and code readability *Java*
- Developed an interpreter for a simple functional language *Python, SML*
- Created an arithmetic calculator and a Euclidean Distance calculator *MIPS Assembly*

ACTIVITIES

- Recipient of the 2018 Grace W. Capen Award
- Ranked amongst the top 250 scholars at the WSC Tournament of Champions hosted by Yale University, won two bronze medals at the global round, stood 4th among 400 scholars in the Scholar's Challenge
- Awarded "Best Explanation of a Complex Concept" for explaining the functioning of gyroscopes
- Top student contributor for the CSE116, CSE250, CSE341, CSE305 and CSE331 Piazza pages
- Ranked in the top 4 bands at Buffalo Untapped, stood 1st in Cord 'n' Blend and 2nd in Wired'14
- Appointed the D-USG of Hospitality of H-MUN for 2 years, handled the catering with a team of 8 people
- Acquired national and international ranks in Science, Math, English, Cyber, Finance and SAT Olympiads
- Performed in numerous plays centered on social reform

CAMPUS INVOLVEMENT

- Design Club, Treasurer** Aug '17 - May '18
- Association of Computing Machinery, Member** Aug '16 - Present
- Jam Club, Member** Sep '16 - May '18

SKILLS

Python, C++, Unity, Java, HTML, CSS, Bootstrap, Flask, PHP, SQL, SML, Assembly