SAUGAT PANDEY

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EDUCATION

Beloit College, Beloit, Wisconsin *Graduating May 2021*
Bachelor of Science in Computer Science, Applied Chemistry, and Mathematics
Cumulative GPA: 3.686/4.0

RELEVANT COURSES

Computer Science

Data Structures and Algorithms, Computer Architecture, Threads and Operating Systems, Algorithms Design and Analysis, Software Capstone I, Software Capstone II, Computer Models and Languages, Database Capstone I

Mathematics

Complex Analysis, Discrete Structures, Abstract Algebra, Linear Algebra, Differential Equation, Vector Calculus

Applied Chemistry

Organic Chemistry I & II (Labs and Lectures), Environmental, Analytical, and Geochemistry Chemistry, Protein Biochemistry

ACADEMIC EXPERIENCES

Summer Science Scholar (Undergraduate Research Assistant), May 2018 – July 2018
Computer Science Department, Beloit College
Professor: Darrah Chavey

- Researched the possibility of generating sub-graphs with 4 or more edges inside aliquot graph using Divisor Function.
- Designed a graphical user interface that allows users to set criteria like number of edges, numerical range to generate graphs along with the list of graphs of certain edges using JAVA GUI frameworks like AWT and Swing.

Student Programmmer, September 2018 – May 2019
Computer Science Department, Beloit College
Professor: Steve Huss-Lederman

- Worked in a group to update the graphing package (Plotly.js) of an open-energy system, which stores the information about energy consumption by the residential halls on campus.
- Analyzed and discarded vulnerabilities related to packages used in the project that appeared in the database.

Special Project, May 2020 – June 2020
Mathematics Department, Beloit College
Professor: Ranjan Roy

- Created reports using LaTeX, each of size 15-20 pages, from a book called "Mathematics for Sustainability by John Roe, Russ deForest, and Sara Jamshidi" which will be used for a course about sustainability at Beloit College. The reports summarized the topics like Networks and Models, Probability and Statistics, understanding of stock-flow systems with respect to sustainability.

OTHER RELEVANT PROJECTS

Chemistry Department, Beloit College, Spring 2020
Topic: Oil Extraction using Steam Distillation
Professor: Laura E. Parmentier

- Worked in a group to extract apple mint and lavender oil using steam distillation and characterized the chemical compounds using NMR & IR Spectroscopy, TLC Analysis and antimicrobial assay.
- Created a report describing the presence of compounds like linalool, linalyl acetate, and beta-caryophyllene based on the results.

Chemistry Department, Beloit College, Spring 2020
Topic: Synthesis of Ibuprofen
Professor: Laura E. Parmentier

- Created a final report for my Organic Chemistry course about synthesizing ibuprofen and recording the product using $_1$H NMR Spectrum.

POSTER PRESENTATIONS

2018 Mid-states Research Consortium, Washington University in St. Louis, Missouri

- Presented poster at an undergraduate research consortium. The presentation was about the research project, *Graphs from the Sum of Divisor Functions,* which was done under the supervision of Prof. Darrah Chavey.

2017 Homecoming Student Days, Beloit College, Beloit, Wisconsin

- Presented poster on a research project, *Graphs from the Sum of Divisor Functions,* to incoming freshman class.

TEACHING EXPERIENCES

Teaching Assistant, September 2018 – May 2019
Computer Science Department, Beloit College

- Courses: Introduction to Object-Oriented Programming, Data Structures and Algorithms
- Organized three 2-hour long help sessions every week to help students understand the topics covered in the introductory CS course and Data Structures.

Teaching Assistant, September 2018 – December 2018
Physics Department, Beloit College

- Course: Fundamental of Physics (PHYS 101)
- Assisted 40-50 students with understanding topics like optics, electric current, work & energy along with the lab experiments.

AWARDS & SCHOLARSHIPS

Presidential Scholarship Awarded merit scholarship of $30,000 annually for four years
Walter S. Haven Physics/Astronomy Prize Performed Outstanding Research Project in STEM
Summer Science Scholar Awarded $4,500 in Summer 2018 for pursuing a research project

SKILLS

Programming Languages: Java, Python, JavaScript, C++, SQL, HTML, CSS, XML
Software and Technologies: Adobe Acrobat, Agile Technologies, Test Driven Development, Scrum, Android Studio
Instrumentation/Equipment: Infrared Spectroscopy, NMR Spectroscopy (^{1}H & ^{13}C), Thin-Layer Chromatography, Capillary Gas Chromatography
Languages: English (Fluent), Nepali (Fluent), Hindi (Native)
GitHub: https://github.com/iamsaugatpandey

EXTRACURRICULAR ACTIVITES

Beloit Investment Club, Beloit College, Spring 2020-Present
Co-Founder and President

- Co-founded the club starting with an investment of $10,000 which focuses on stocks, ETFs, and options.
- Organize biweekly meetings with an attendance of 30 students to discuss the stock market and lead the team of analysts.

Beloit Student Government, Beloit College, September 2018 – May 2020
Funding Board and Communication Director

- Managed fund of approximately $360,000 across more than 40 student-run clubs and organizations and chaired a committee to review student proposals for funding.
- Effectively managed Student Government communication platforms, including social media and websites, and assist faculty and students with outreach and event advertisement.

REFERENCES Available upon request