

SAUGAT PANDEY

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Box #1469, 700 College St.
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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 Introduction to Object-Oriented Programming, 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 Calculus II, Discrete Structures, Abstract Algebra, Linear Algebra, Differential Equations, Complex Analysis

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

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

TEACHING EXPERIENCE

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

Teaching Assistant

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

Physics Department, Beloit College, September 2018 – December 2018

Teaching Assistant

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

ACADEMIC EXPERIENCES

Computer Science Department, Beloit College, May 2018 – July 2018

Summer Science Scholar (Undergraduate Research Assistant)

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.

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

Student Programmer

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.

Mathematics Department, Beloit College, May 2020 – June 2020

Special Project

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 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 ^1H NMR Spectrum.

POSTER PRESENTATIONS

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

- Presented a 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 Home Student Days, Beloit College, Beloit, Wisconsin

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

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 (^1H & ^{13}C), Thin-Layer Chromatography, Capillary Gas Chromatography

Languages: English (Fluent), Nepali (Fluent), Hindi (Native)

GitHub: <https://github.com/iamsaugatpandey>

EXTRACURRICULAR ACTIVITIES

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 a 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 assisted faculty and students with outreach and event advertisement.

REFERENCES Available upon request