Katie Dao Nguyen

San Jose, CA | (408)784-9601 | nguyenkatie98@gmail.com | LinkedIn | Portfolio
Areas of Focus: Database Management | Numerical Analysis | Full Stack Development

Summary

Senior Applied and Computational Mathematics student with proven guidance, and counseling skills. Ability to be a team player and resolve problems and conflicts professionally. Experienced with data scraping, database management, developing algorithms for mathematical analysis, and practical team projects in coursework. Looking to contribute my knowledge and skills in data structures and algorithms. Highly analytical, innovative, and performance-driven professional.

Education

B.S., Applied Mathematics, Concentration in Applied and Computational Mathematics   Spring 2021
  San José State University, San Jose, CA
Relevant Coursework: Data Structures and Algorithms, Discrete Mathematics, Ordinary Differential and Dynamical Systems, Numerical Analysis and Scientific Computing, Database Management Systems, Introduction to Computer Graphics, Applied and Industrial Abstract Algebra, Applied Probability and Statistics
Technical Skills: Java, HTML/CSS, JavaScript, SQL, MATLAB, Python, C++, MS Excel, MS Word, MS PowerPoint

Projects

Scopus Data Scraping   June 2019 - December 2019
Built information extraction pipeline using MySQL and Natural Language Processing Toolkit library to analyze the evolution of patrimonialism in East Asian cultures based on articles in the Scopus Scientific Database.
Languages: Python, SQL

Database Management Systems Final Project   Fall 2020
Developed a store warehouse management system to search and manipulate product, order, and employee data . Designed ER-diagram and translated the model to a relational schema. Created and implemented a web application using JSP, JDBC, and Apache Tomcat.
Languages: SQL, Java, HTML, CSS, Javascript

Coursework Experience

- Study of data structures and algorithms through object oriented programming to optimize performance and database management systems to query, store, and facilitate data manipulation and access in databases
- Development of algorithms and mathematical models for efficient and accurate scientific computing and analyzing numerical stability and errors
- Application of inferential statistics and decision making based on data analysis and probability models
- Computer graphic design through graphics algorithms, vector geometry, geometric transformations, and the graphics pipeline
- Study of abstract algebra concepts and their applications to physical sciences and computing, such as coding theory, cryptography, and robotics

Experience

Sales Associate Shift Leader , Paris Baguette Bakery, San Jose, CA,   August 2017 - March 2020
- Collaborated in a team to provide excellent customer service and achieve monthly sales quota.
- Facilitated new employee training by sharing product knowledge and explaining routine procedures.
- Inputted and validated sales and inventory data daily

Math and English Tutor , San Jose, CA   August 2013 - May 2020
- Assisted students (primary through high school) in understanding math concepts
- Assisted non-native English speakers in understanding reading and math materials in English
- Prepared activities to improve understanding of math concepts and English comprehension