Brian Salchert

Avon, CT | 860.899.9640 | brisalchert@gmail.com |

www.linkedin.com/in/brian-salchert | https://github.com/brisalchert |

PROFESSIONAL PROFILE

Driven and detailed computer science student with a solid background in coding, software engineering, data analysis and machine learning technologies. Proficient at manipulating large datasets and designing efficient algorithms to solve unique problems. Adept in troubleshooting issues with software and hardware. Consistently exceed quality expectations and meet deadlines on time. Core competencies include:

- Data Structures & Algorithms
- Discrete Math / Runtime Analysis
- Documentation
- Testing / Troubleshooting
- Communication

- Machine Learning & Neural Networks
- Data Cleaning
- Data Analysis & Visualization
- Natural Language Processing
- Customer Service

EDUCATION / CERTIFICATIONS

Bachelor of Science, Computer Science, Colorado State University Global (June 2025)

SQL Associate Certification – DataCamp

Associate Data Scientist in Python Certification – DataCamp

RELEVANT PROJECTS

TEXT CLASSIFIER FOR AI-GENERATED TEXT

2024

Main Developer

- Built a LSTM recurrent neural network in Python for classifying text data.
- Explored and analyzed datasets for relevant characteristics and statistics.
- Cleaned and preprocessed data for use in neural network architectures.
- Recorded and plotted classification model metrics for performance analysis.
- Tuned model and engineered improvements for enhanced accuracy and minimized loss.

SUDOKU DESKTOP APPLICATION

2024

Main Developer

- Developed a Java desktop Sudoku game with randomized board generation.
- Incorporated algorithms for solving a puzzle or determining the existence of a single, unique solution.
- Utilized JavaFX for user interface design, enforcing the Model-View-Controller design pattern.
- Performed troubleshooting and algorithm analysis to resolve issues and improve runtime performance.

AUDIO CLASSIFICATION CNN

2023

Main Developer

- Created a convolutional neural network in Python for classifying samples of battlefield sounds.
- Converted waveform files into spectrogram images to be analyzed by the CNN.
- Implemented a 2D CNN model using the TensorFlow Keras API.
- Achieved validation precision of higher than 80%.

CAREER SUMMARY

DA CAPO OF AVON April to September 2024

Host

- Plan and organize seating for reservations and walk-in guests.
- Take and fulfill takeout orders using restaurant POS system.
- Maintain a welcoming and organized restaurant environment.

AVON PUBLIC SCHOOLS Seasonal 2022 to 2024

Pit Orchestra Musician

- Perform as an alumnus bassist for the Avon High School Spring Musical.
- Prepare and rehearse music weekly.
- Work with director to identify areas for improvement and solutions in rehearsals.

TECHNICAL SKILLS

Windows 10 & 11, Git, GitHub, Java, Python, PostgreSQL, MySQL, PyTorch, JavaFX, HTML, CSS, JavaScript, C++, IntelliJ IDEA, PyCharm, Visual Studio Code