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Education

- **University of California, Berkeley** Berkeley, CA
  Master of Engineering, Data Science and Systems *Aug. 2023 – May 2024*
  - *Relevant Coursework:* Natural Language Processing, Machine Learning, Applications of Parallel Computing, Product Management, Technology Strategy

- **Arizona State University (Barrett, the Honors College)** Tempe, AZ
  Bachelor of Science, Computer Science; Minor, Korean Studies *Aug. 2019 – May 2023*
  - *Relevant Coursework:* Artificial Intelligence, Data Mining

Skills

- **Programming Languages**: Python, C/C++, JavaScript, Java
- **Other Relevant Skills**: PyTorch, TensorFlow, Docker, Hugging Face, Machine Learning, Data Visualization, Data Scraping, Natural Language Processing, ML Modeling, Fine-tuning, SQL, MongoDB, CUDA, Data Structures & Algorithms, Database Design & Management, Dynamic Programming, Parallel Computing, Full Stack Development, Git, Agile Methodologies, Operating Systems, Object Oriented Programming

Highlighted Projects & Experience

- **Deep Learning for Patent Disambiguation** Berkeley, CA
  Master's of Engineering Capstone Project *September 2023 – Present*
  - Working with a team of Master's and PhD students under Dr. Lee Fleming on a deep learning project to identify patents by the same inventors in a world-wide database through classification.
  - Building a clustering model with PyTorch to most accurately group patents by inventor with 90% accuracy.
  - Feature engineering on the patent data-points to extract meaningful data.
  - Performed model assessment with metrics such as ROC curve to identify areas for improvement.
  - Model fine-tuning on existing work to increase efficiency and accuracy.

- **Corsair Ranch Software Factory at Georgia Tech Research Institute** Tucson, AZ
  Software Engineer Intern *May 2022 – Aug. 2023*
  - Trained the BERT model to convert natural language questions to SQL queries and developed a Python user interface which returned medical data from the input questions.
  - Maintained a weekly sprint schedule with daily stand-ups in Jira to stay updated on issues, keep backlog rotating, and assign tasks.
  - Developed company website in ReactJS to improve security,interface, and usability of the site. (https://corsairranch.dso.mil/).
  - Implemented features full-stack, including unit testing and database migrations and models, on an original ReactJS web application to allow employees to track pay in the Air Force.

- **Center for Accelerated Operational Efficiency (CAOE) at ASU** Tempe, AZ
  Undergraduate Programming and Data Analysis Intern *Aug. 2021 - July 2022*
  - Under assistant professor Dr. Adolfo Escobedo, created user interface to gather training data for a computer vision tool to identify dangerous objects in airport baggage scans.
  - Implementing mouse tracking feature on Amazon Turk survey for creating a data-set. Portrayed user attention tracking in a heat map to generate more effective training data.
  - Assisted in generating images with varying levels of complexity and object density for testing and gathering data, working with PhD students under Dr. Olac Fuentes at University of Texas, El Paso