TOM O' CONNELL

tomoccollege@gmail.com | (623) 888 9955

EDUCATION

Arizona State University   August 2020 – April 2024
- **Major:** Data Science, BS   GPA: 3.6 / 4.00
- **Certificates:** Applied Business Data Analytics and Mathematical Concepts of Engineering
- **Coursework:** Foundations of Machine Learning, Statistical Modeling and Inference, Applied Linear Algebra

PROFESSIONAL EXPERIENCE

Intel, Software Developer   Aug 2022 – present
- I worked on the development team in the front and back-end development of numerous Intel websites, including a scheduling app used by 3000+ technicians and 200+ managers in FAB labs within Arizona. I developed the webpage that managers can use for creating FAB Labs quarterly expectations. I combined C# and SQL to store and retrieve data and JavaScript to design the webpage.
- Worked in a dynamic developer team environment utilizing Cloud Foundry and GitHub to streamline coordination and version control during the development process.
- I am currently working on the development team for a generative AI model called 'ChipChat' for technicians in the FAB labs which can process Natural Language questions and queries from technicians and provide detailed solutions. AI is currently being tested with over 100 technicians within Intel FAB labs in Arizona.

Hindman Auctions, Business Analyst   Apr 2022 – Aug 2022
- I worked with clients in Arizona, California, and Colorado region in the consignment of their estates.
- I worked on a team that was responsible for negotiating deals with clients and/or client's legal representations in the preparation and valuation of estates and trusts. Deal negotiation involved discussion of Hindman's fees and deductions from estates, benefactors of estates sale, and general wealth management. Largest estate I worked on being $2.3 million.
- I developed skills in Deal Structuring, Consignment, Client Relations, Trust Management, MS Excel.
- I also worked in the preparation of auctions throughout the Southwest including a Denver auction which had a hammer price of $3.1 million.

Hindman Auctions, IT Analyst   Apr 2021 – Apr 2022
- I worked as a Software Developer with an external development team in the development of 'Gavelizer', an application built for Hindman Auctions. I developed the UI using JavaScript for the webpage that allowed Auctioneers to clerk auctions. I also worked on the back end for the webpages that generate invoices, and catalog auctions.
- I directly worked with Cisco Systems in the implementation of Cisco Meraki, a cloud-based application which allows the management of multiple systems, servers, and security devices within Hindman.
- I developed skills in JavaScript, Linux, Cisco Products, RubyOnRails, Gitlab.

PROJECTS

Machine Learning and Credit Default (Capstone Project)
- My team and I used the loan applicant data provided by the Home Credit Group to create a ML model that could identify the applicants who are most likely to default using both Supervised and Unsupervised techniques.
- Using over 287 features of applicants, we tested three different algorithms: Logistic Regression, Decisions Tree, and Random Forest. We evaluated our classification models using the following metrics: Accuracy, Precision, Recall, F1 Score, and AUC Score. Our Random Forest Classifier ended up performing the best with an 86% accuracy.
- Built using Pandas, numpy, Seaborn, Sklearn, PyOD, and Jupyter Notebook.

Autonomous Driving Agent (Python)
- Created a virtual autonomous driving agent. Developed a Q Learning Agent that based its decisions on the features mentioned and analyzed from the environment to decide on the car's optimal move. Agent was tested against numerous scenarios involving multi lane highways, pedestrians crossing the road and many others.

PROGRAMMING/FINANCIAL SKILLS

Languages: Python, C/C++, JavaScript, R, C#
Database Management: SQL (MySQL, MariaDB) Cisco Meraki, Dbeaver
Tools: GitHub, MS Excel, MS PowerPoint, Jupyter Notebook

CERTIFICATIONS

- Foundations of Financial Risk, GARP
  - Developed skills in Quantitative Analysis, Credit Risk Assessment and Probability modeling.