

# Parker Pan

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## EDUCATION BACKGROUND

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**University of Southern California** | MSc Analytics (Data) *Sep 2022 – Dec 2023*

- I am studying a 2-year MSc course and looking for Data/ML Engineer roles from Fall 2023
- Key modules: Data Management/Mining/Analytics/Visualization, Machine Learning, Deep Learning, Optimization Methods, Data Analytics Consulting

**University of Liverpool** | BSc (Hons) Mathematical Finance *Sep 2018 – Jul 2022*

- Key modules: Financial Mathematics, Graph Theory, Risk Theory, Stochastic Modelling & Theory in Data Science, Applied Probability, Actuarial, Econometrics

## TECHNICAL SKILLS

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**Programming Languages**: Python, SQL, R, HTML, Swift

**Databases & Cloud Technologies**: MySQL, Snowflake, AWS, GCP

**Computer Vision Tools**: CVAT, CloudCompare, OpenCV, TensorFlow, PyTorch, Keras

**Other Data Analytics Tools**: Excel, Tableau, MATLAB, Maple

**Prototype & Diagram Tools**: Axure, Draw.io, Visio

**Languages**: Chinese(native), English

## CORE INTERNSHIP AND PROJECT EXPERIENCE

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**Polyexplore** | ML/Software Engineer - HD Mapping *United States, Jun 2023 – Present*

- Utilize OpenCV for processing geographic images and extracted point cloud coordinates, including image denoising/segmentation, line/road mark identification
- Apply transfer learning, adjusting the deep learning models such as LaneNet

**Data Management based on Snowflake** *Mar 2023 – Apr 2023*

- Download required logistics company data from AWS and design the data warehouse
- Define, create, and populate the dimension tables. Use SQL for data query

**Modeling Earthquake Damage, A DEIVENDATA Competition** *Mar 2023 – Apr 2023*

- After data preparation, leverage SVM/CatBoost/XGBoost to identify key features contributing to earthquake damage, ranking top 2% out of all participants

**Analysis of US Second-Hand Car Pricing** *Feb 2023 – Mar 2023*

- Write EDA report and create Decision-Tree, RF, and MLR model to design a car pricing forecasting system

**Research of the Titanic Survivor** *Oct 2022 – Nov 2022*

- Apply KNN/SVC/RF/GB/MLP/Logistic Regression methods to modelling and analysing Titanic surviving passengers of different ages/classes/gender

**Binary Animals Image Identification and Classification** *Feb 2021 – May 2021*

- Utilize the Hard/Soft SVM to recognize and classify thousands of animal pictures by MATLAB

## OTHER PRODUCT MANAGEMENT EXPERIENCE

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**Accenture** | Analyst in Fintech Consulting Dept *China, Jun 2021 – Oct 2021*

- Mapping out current insurance business and operation system at CPIC using Visio flow chart
- Complete BRD/FRD for integrating insurance sales businesses and
- Design prototype of purchase, query, and task assignment systems using the Axure.

**ByteDance** | Product Operation Manager (Dongchedi App) *Remote, Feb 2021 – Mar 2021*

- Write BRD/FRD for app simplification, fuzzy search design, and AI recommendation model
- Create a prototype design of the app's homepage and shopping page in a new version using Axure
- Quantify customer acquisition cost, retention rate, and consumer satisfaction

**Akmii** | Product Manager – Design&Test (Yeeflow Software) *China, Dec 2019 – Feb 2020*

- Assist in web front-end development and logic function testing of Swire Group
- Help the AIIB design and test the investment process management and daily operation platform