

Yan (Yves) Yang

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EDUCATION

University of Chicago

Master of Science in Computer Science, GPA: 3.90/4.00

Chicago, IL

December 2023

Relevant Coursework: Programming (Python, Haskell), Algorithms, Computer Systems, Big Data (AWS, Hadoop, SQL, NoSQL, Data Scraping and Cleaning), AI (Deep Learning, LLM), Mobile/Web Development (Swift, Kotlin, JavaScript), Product Management

Wake Forest University

Master of Science in Accounting Analytics (Transaction Service Concentration), GPA: 3.88/4.00

Winston-Salem, NC

December 2020

Relevant Coursework: Financial Accounting, Financial Management, Data Analytics and Visualization (Alteryx, Tableau)

Honors: Graduated with Distinction, Beta Gamma Sigma Honor Society

Central University of Finance and Economics

Bachelor of Management (Accounting Concentration), GPA: 87.59/100

Beijing, China

May 2019

Honors: Graduated with Distinction, Dean's List (8 out of 8 Semesters)

PROFESSIONAL EXPERIENCE

Fenghe Smart Robotics

Product Development Intern

Xi'an, China & Chicago, IL

March 2022 - August 2023

- Conceptualized and executed the roadmap and end-to-end development for a fruit harvesting software and end-user application, addressing the market gap in automated fruit picking, and providing a resource-efficient and environmentally-conscious solution.
- Facilitated iterative testing and refinement of the image recognition algorithm and end-user application, enabling precise fruit identification and efficient harvesting with minimal damage, resulting in a 50% processing time reduction per target.
- Orchestrated daily collaborations across business teams and technical teams of 8 engineers and UI designers, ensuring the seamless integration between business operations and product development throughout the entire lifecycle.
- Pitched and released the product in 2 fruit cultivation zones, monitoring performance metrics and gathering user feedback for ongoing product enhancements and scaling, elevating customer experiences, and ultimately securing a \$700K new investment.

Deloitte & Touche LLP

Senior Assistant, Banking & Capital Markets

New York, NY

January 2021 - January 2022

- Collected and integrated data from client's Oracle Cloud and external financial databases using SQL and APIs. Implemented scripts and tools to streamline data collection, validation, and ingestion, reducing task duration by 50% through data automation.
- Utilized Python and Omnia AI platform to analyze datasets, reveal patterns, and perform anomaly detection and outlier analysis on 3 complex accounts and inter-company datasets, identifying risks and highlighting irregularities in financial transactions.
- Facilitated project collaborations across 5 countries and 4 distinct service teams. Functioned as the pivotal liaison with the client's C-suite and various departments, proactively addressing inquiries, resolving issues, and presenting visualizations and reports.
- Focused on capital market clients with over 10 global entities and \$70B total assets. Utilized extensive experience in US GAAP, IFRS reporting, and SEC filings to deliver over 20 high-quality financial reports and 2 due diligence reports.

National Bureau of Statistics

Data Analytics Intern, The Fourth National Economic Census Team

Xi'an, China

February 2019 - March 2019

- Extracted, processed and analyzed over 800 private firms' unstructured operational data using Python, visualizing business trends and growth prospects through Tableau, offering an overview of SMEs' performance for well-informed policy formulation.
- Achieved a 70% acceptance from surveyed business owners for a report on optimizing data usage to boost business performance.

ICBC Credit Suisse Asset Management Co., Ltd.

Portfolio Management Intern, Asset Management

Beijing, China

August 2018 - October 2018

- Developed quantitative models to monitor capital prices and portfolio performance, incorporating factors like risk tolerance and return objectives, generating 11 weekly and 3 monthly reports, providing portfolio transparency and accountability to stakeholders.
- Performed due diligence and analysis on 2 companies within the TMT and Biotech sectors, resulting in evidence-based reports, and visually informative dashboards, facilitating data-driven portfolio constructing and optimizing process by senior leaders.

SearchSino Market Research

Part-Time Analyst, Operation & Research

Xi'an, China

July 2015 - August 2018

- Developed and deployed data collection and transformation, encompassing product usage records, over 1K consumer surveys, qualitative data from 20 focus group sessions, covering consumer goods, technology, automotive, and energy industries.
- Conducted A/B Testing and statistical analysis including regressions, segmentation, and optimization on business metrics and market data to provide actionable insights. A new site proposal led to client's record-breaking earnings in the subsequent year.

PROJECTS ([Complete Portfolio](#))

ZipEstate — A Big Data Architecture and Application on US Real Estate Market

September 2023 - December 2023

- Utilized Python to extract and conduct exploratory data analysis over 7.4M transactional and geospatial data from the past decade. Designed and developed a high-volume data pipeline within the Hadoop distributed system to facilitate scalable data analysis.
- Implemented a lambda architecture in the AWS cloud environment using Hive for data warehousing, Spark for data processing, Kafka for data streaming, and Express.js for the web application, enabling users' efficient data queries and real-time data updates.

Efficiently.ai — A Generative AI Toolkit to Process Unstructured Data


September 2023 - December 2023

- Developed the application using Python, enabling capabilities to process multimodal inputs, including unstructured text inputs, audio and video files, web links, and datasets, complementing by advanced features for data analysis and visualization.

- Integrated machine learning and LLM techniques, including chains configuration, prompt engineering, retrieval augmented generation, text moderation, and leveraged Langchain, OpenAI API, unstructured.io, and the Streamlit framework.

Business Viz — A Finance Performance Metrics Dashboard Web Application  July 2023 - August 2023

- Orchestrated development of a comprehensive business metrics dashboard following agile methodology, continuously integrating and deploying machine learning projections and offering real-time analytical insights through intuitive UI and data visualization.
- Leveraged Redux Toolkit for seamless state management, Material UI component library for a modern and user-friendly interface, and Recharts for dynamic and interactive charts visualization.
- Engineered a robust API backend using Express.js, coupled with efficient data storage and retrieval through MongoDB, resulting in a flexible and responsive platform for performance monitoring and business decision-making.

Financial Analysis and Algorithmic Trading using Python and QuantConnect  June 2023 - August 2023


- Analyzed 20 automotive companies' 5-year financial performance and correlation using yfinance, numpy, pandas, and matplotlib.
- Optimized an algorithmic trading strategy tailored to the automotive market, with weighted consideration of financial indicators, sentimental analysis using Tiingo API and Vader analyzer, machine learning predictions using RandomForestRegressor.
- Achieved a 128.80% return during a 5-year backtesting and generated a 18.74% return during a 3-month live trading deployment, affirming its real-world applicability and performance.

Oscar Pictures — A Movie Database and Tracker iOS Application  March 2023 - June 2023

- Researched user demands, identified user pain points and designed prototypes in Figma.
- Developed the application in Swift, integrated data persistence with CoreData, enabled interactive information with WebKit, and enhanced user experience with immersive backgrounds, randomized recommendations, statistics and status tracker features.
- Maintained ongoing support for the application, addressed issues, and implemented new features based on user feedback to ensure application responsiveness, error prevention, and compatibility across different devices.

Apple Maps Product Redesign  March 2023 - June 2023

- Identified user pain points and prioritized features and capabilities through direct inputs from users and developers.
- Improved user experience and efficiency by a more intuitive interface, resulting in a significant reduction in search-related task time and enhanced multitasking capabilities.
- Redesigned color palette, element position and menu logic and innovated offline maps and screen-on-screen feature to provide better accessibility, enhance user efficiency and expand usage scenarios.
- Conducted continuous prototyping and testing in Balsamiq, improved design, and implemented features based on user feedback.

Building Modern Computer — A Hardware and Software Practicum  January 2023 - March 2023

- Designed and implemented a computing system from low-level logic gates to a complete computer architecture.
- Built assembler, VM translator and compiler using Python to enable the conversion between assembly code, intermediate VM code, and higher-level language (Jack).
- Developed an interactive graphical keyboard-controlled game featuring randomly generated moving characters using object-oriented programming techniques and it successfully compiled and executed on the constructed computer.

SKILLS & INTERESTS

- Programming with Python, Java, Haskell, Scala
- Mobile Development with Swift (iOS), Kotlin (Android)
- Web Development with HTML, CSS, JavaScript, React
- UI/UX and Product Design with Figma, Balsamiq
- Business Acumen in Strategic Analysis and Market Research
- Interests: Language Learning, Card Magic, Video Editing, UI Design, Solving Hanayama Cast Puzzles, Poker
- Data Analytics with Tableau, Alteryx, SQL, Hive, Spark, Kafka
- Financial Analysis with Capital IQ, Bloomberg, QuantConnect
- Work Demonstration with Microsoft Office, Keynote
- Video Editing with Final Cut Pro
- Expertise in Project Management and Financial Management

COMMUNITY AND LEADERSHIP

Second Harvest Food Bank Winston-Salem, NC
Volunteer November 2019 - December 2020

- Actively volunteered in warehouse operations such as food sorting and pallet building.

Agricultural E-commerce Project Hangzhou, China
Team member July 2016 - August 2016

- Designed and implemented an agricultural product selling and distributing platform to empower local farmers' direct sales.
- Implemented a QR code system for improved product traceability and quality control.
- Provided strategic and technical support in establishing partnerships among suppliers, logistics providers, distributors, and regulators to ensure seamless transactions and operations throughout the business cycle.

International Business Association Beijing, China
Co-founder September 2015 - June 2017

- Established the association and successfully secured a \$20K sponsorship from New Oriental Education Group.
- Achieved significant membership growth of over 500% and received the "2016 Best Student Organizations" award.

Arts Union & Host Group Beijing, China
Vice President September 2015 - June 2017

- Orchestrated 6 large-scale events, involving over 100 staff and 800 attendees per event.
- Facilitated collaborations and partnerships across educational institutions, initiated cooperative training programs.