

# KAISEN YE

kaisenye20@gmail.com | +1 (346) 368-1097 | Expected Graduation: May 2023

**LinkedIn:** [linkedin.com/in/kaisenye/](https://www.linkedin.com/in/kaisenye/) | **GitHub:** [github.com/kaisenye](https://github.com/kaisenye) | **Personal Website:** [kaisenye.github.io](https://kaisenye.github.io)

## SUMMARY

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- **Objective:** Seeking Software Developer/Engineer position in 2023
- **Languages:** Proficient: Python, C++, SQL; Prior Experience: C#, Java, JavaScript, HTML/CSS
- **Frameworks:** Angular, Bootstrap, Flutter, Kubernetes, React, Node.js, TensorFlow
- **Databases:** AWS, BigQuery, Firebase, MongoDB, MySQL
- **Developer Tools:** Android Studio, Git, GitHub, Jupyter, PyCharm, Visual Studio, Eclipse

## EDUCATION

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**Indiana University at Bloomington** | Bloomington, IN

*Expected May 2023*

*Bachelor of Science* | **Major:** Applied Mathematics

*Bachelor of Science in Business* | **Major:** Information Systems

- **Academic Honors:** Executive Dean's List, F&D Spencer Scholarship
- **Relevant Coursework:** Data Structures and Algorithms, Database Management, Principles of Software Design

## WORK EXPERIENCE

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**PayPal**

**Los Angeles, CA**

*Software Engineer Intern*

*May 2022 – August 2022*

- Performed thorough Exploratory Data Analysis using **BigQuery**, **pandas**, **NumPy**, and **Plotly** on **over 36 million records of online shopping event data** to delve into how end users interact with E-commerce websites
- Built and trained machine learning models with **TensorFlow** and **Google AutoML** to make predictions on buying behaviors and to identify potential customers, resulting in **over 98% average Precision-Recall scores on testing sets**
- Deployed a machine learning pipeline using **Kubernetes** to enable automatic management and scaling of the models
- Implemented **CircleCI** validation along with **mypy** and **pylint** for automated **CI/CD workflow** in **10+ repositories**

**SOSV Venture Capital**

**New York, NY**

*Data Analyst Intern*

*May 2021 – July 2021*

- Experienced with Agile methodology **Sprint** with **ClickUp** for project management and **Git** for software development
- Designed and implemented a data update strategy using **Webhook** and **urllib2** to transfer startups' data (financial data, active users, growth profile, etc.) from Google Sheets to ClickUp, **saved more than 90% of data transfer time**

**Freestone Partners, LLC**

**Houston, TX**

*Summer Analyst*

*May 2020 – August 2020*

- Performed industry and company research using **Python** and **Scrapy** to search companies with \$10 – 50 million in annual revenue and a potential gross IRR of 20 – 30% in the industry of manufacturing and industrial services
- Devised a Discounted Cash Flow model using **Excel** for acquisition development of a **\$30 million** company

## PROJECTS

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**Discrete Differential Geometry Research Lab** | C++, Geometry Central, Polyscope

*December 2021 – May 2022*

- Explored differential geometry in discrete context in topics including curves and surfaces, connections and parallel transport, exterior calculus, Hodge decomposition, and conformal mapping
- Implemented algorithms to process a variety of discretizing theories using **C++** with **Geometry Central** for the back-end processing, **Polyscope** for the front-end rendering, and **GoogleTest** for unit testing

**MyLibrary Web App** | Bootstrap, Node.js, Express, MongoDB

*December 2021 – March 2022*

- Designed a pipeline with **Node.js**, **Express**, and **MongoDB** to process and store information of library collections including books, periodicals, newspapers, manuscripts, films, and documents
- Built a responsive and user-friendly website via **Bootstrap**, and customized widgets and icons using **Illustrator**

**Real-time Tweet App** | Android Studio, Flutter, Dart, Firebase

*October 2021 – January 2022*

- Developed a tweet **Android** mobile app using **Flutter** and **Dart** that allow users to tweet and follow users in real-time
- Leveraged **Firebase** and **NoSQL** to store, secure, process, and analyze users' data, including posts and authentication

**Algorithmic Trading Robot** | Alpaca API, Python, Pandas, Plotly, NumPy

*October 2021 – January 2022*

- Programmed in **Python** to automate trading activities and market data streaming to simulate various trading strategies