

KAISEN YE

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

SUMMARY

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

EDUCATION

Indiana University at Bloomington | Bloomington, IN

Expected May 2023

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

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

WORK EXPERIENCE

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 container management and scaling of the cloud-based machine learning models, improved access and portability of all stages of machine learning workflow
- Implemented **CircleCI** validation along with **mypy** and **pylint** for automated **CI/CD workflow** in **10+ repositories** to provide more visibility into the testing process, **largely increased efficiency in identifying failed or flaky tests**

SOSV Venture Capital

New York, NY

Data Analyst Intern

May 2021 – July 2021

- Adopted Agile methodology **Scrum** with **ClickUp** for project management and **Git** for software development cycle
- 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**

PROJECTS

Campground Rating Web App | Node.js, Express, Mongoose, Mapbox

July 2022 – October 2022

- Designed a pipeline to process large-scale campground information records: crawled data with Python **Scrapy**, served website with **Node.js** and **Express**, and visualized geographic data with **Mapbox.js** and **GeoJSON**
- Leveraged ODM library **Mongoose** of MongoDB to build data model and to perform data schema validation

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 using **Bootstrap**, and customized widgets and icons using **Illustrator**

Real-time Tweet Mobile 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