

{Sam DeFrancisco}

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Soon to be Software Engineering graduate with a proven track record of developing scalable applications and solving complex data problems. Demonstrated ability to learn and innovate through the solo development of Crossover Clips, a user-centric application with over 2000 active users, utilizing a self-taught tech stack including Python, React, Postgres, and MongoDB. **Seeking to leverage my experience in Python, Java, database, and cloud technologies to contribute to impactful Full Stack, Back End, or Data Engineering projects in a dynamic team environment.**

| Education |

Iowa State University
Software Engineering | GPA: 3.2

Bachelor of Science
August 2020 – May 2024

| Work Experience |

Software Engineering Intern | Kingland Systems
Python, Java, SQL, PySpark, Hudi, AWS, Jira, Confluence

Ames, IA, full-time
May 2023 – August 2023

- Full time member of Data Lakehouse team for Kingland's flagship solution, Independence
- Designed Extract Transform Load (ETL) scripts using Python to handle initial loads and change data capture
- Collaborated with overseas team members to integrate new methods for complex ETLs
- Trained the US team with the new process, facilitating a seamless transition
- Participated in daily standup, sprint planning/retro, and weekly checkpoints with overseas team
- Utilized numerous AWS services (Glue, S3, DMS, RDS, Athena), gained valuable insights into cloud-based data management and analysis

| Personal Projects |

Crossover Clips

crossoverclips.com

Python, ReactJS, Postgres | MongoDB, MUI, fastAPI

A Web application with an intuitive UI to view and download **any NBA highlight** dating back to the 2014 season. Users can easily search for highlights based on teams, matchups, or specific dates, and further filter the plays by players, quarters, and stat-types

- Reverse engineered multiple NBA API's, merging diverse data into a central database allowing for over 40,000 highlight views and 9,000 downloads since deployment
- Over ten million individual highlights stored, migration to Postgres with added optimization cut average response time to under half a second
- Implemented automated data gathering using CRON jobs to seamlessly update client side with newest games and highlights
- More efficient than NBA's own League Pass Feature

Portfolio Website

sjdefran.com

ReactJS, MUI

Showcases more personal and academic projects, including my favorite group project CyRate (Java/SpringBoot). Learn more about me and check it out!

| Relevant Coursework |

Communication (4.0 GPA): EN150, EN250, Technical Writing, Public Speaking

Programming (Java/C)(3.3 GPA): OOP, Data Structures, User Interfaces, Embedded Systems, Android Dev, DBMS, Software Architecture, Operating Systems, Algorithms

| Summary of Skills | (Ordered by Experience)

Languages: Python, Java, SQL, JavaScript, NoSQL, HTML, CSS C, C#, Terraform

Frameworks/Libraries: React, fastAPI, SpringBoot, JPA, PySpark, Hudi, MUI, Flask, Django

Developer Tools: Git (GitLab/GitHub/CI|CD), VSCode, Linux, Postman, NPM, PIP, Conda, Maven

Notable 2023 Achievement: D-League Mens Intramural Basketball Champion!!