SOFTWARE ENGINEERING CAREER ROADMAP

HEADSTARTER x SJU ACM STUDENT CHAPTER x
GOOGLE DEVELOPER'S STUDENT CLUB x
SJU DATA SCIENCE CLUB

SJU ACM
Student Chapter

SIGN IN FORM:

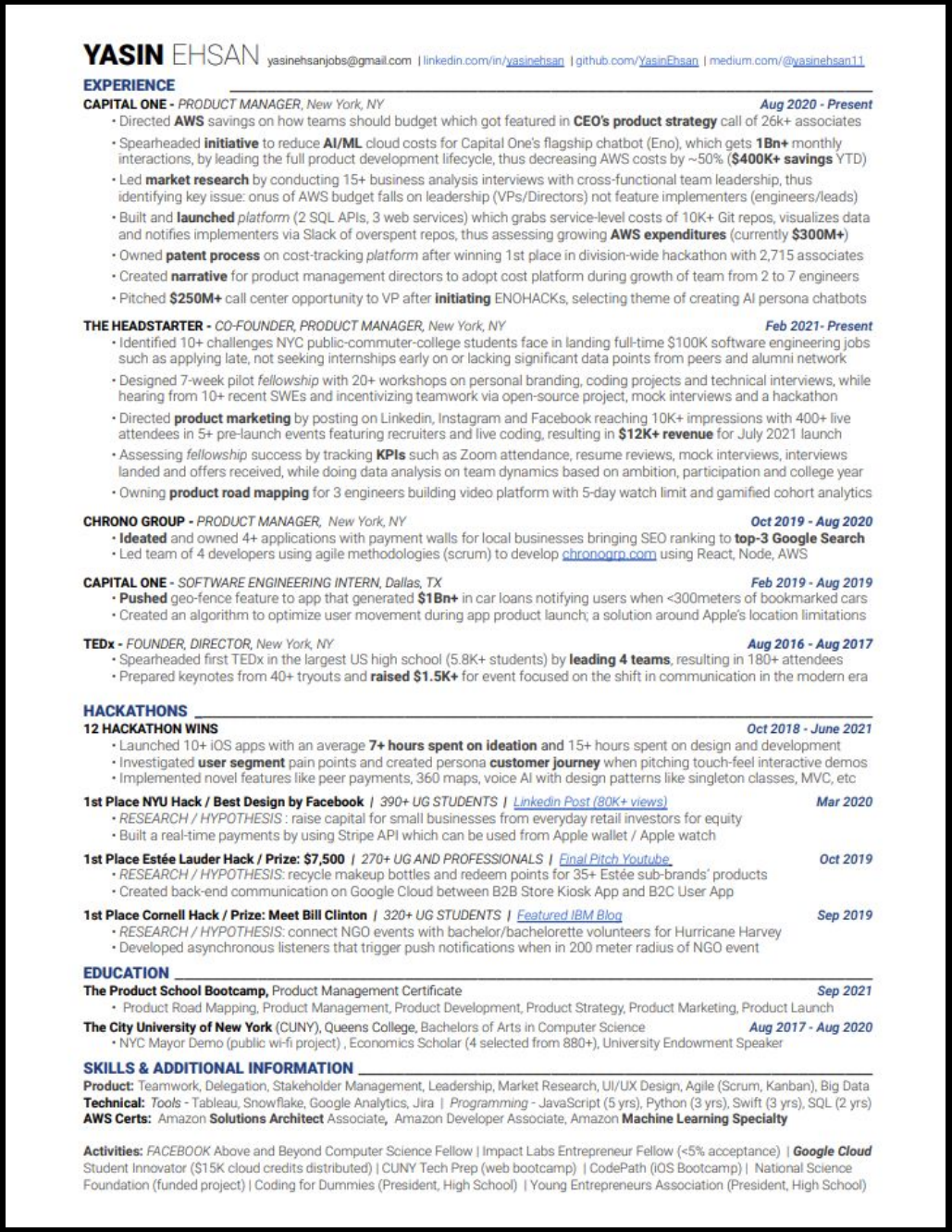
Yasin's Resume

- Experience Section

- Hackathons Section

- Education Section

- Skills & Additional Info Section



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EXPERIENCE

CAPITAL ONE - *PRODUCT MANAGER, New York, NY* — *Aug 2020 - Present*

- Directed **AWS** savings on how teams should budget which got featured in **CEO's product strategy** call of 26k+ associates
- Spearheaded **initiative** to reduce **AI/ML** cloud costs for Capital One's flagship chatbot (Eno), which gets **1Bn+** monthly interactions, by leading the full product development lifecycle, thus decreasing AWS costs by ~50% (**$400K+ savings** YTD)
- Led **market research** by conducting 15+ business analysis interviews with cross-functional team leadership, thus identifying key issue: onus of AWS budget falls on leadership (VPs/Directors) not feature implementers (engineers/leads)
- Built and **launched** *platform* (2 SQL APIs, 3 web services) which grabs service-level costs of 10K+ Git repos, visualizes data and notifies implementers via Slack of overspent repos, thus assessing growing **AWS expenditures** (currently **$300M+**)
- Owned **patent process** on cost-tracking *platform* after winning 1st place in division-wide hackathon with 2,715 associates
- Created **narrative** for product management directors to adopt cost platform during growth of team from 2 to 7 engineers
- Pitched **$250M+** call center opportunity to VP after **initiating** ENOHACKs, selecting theme of creating AI persona chatbots

THE HEADSTARTER - *CO-FOUNDER, PRODUCT MANAGER, New York, NY* — *Feb 2021- Present*

- Identified 10+ challenges NYC public-commuter-college students face in landing full-time $100K software engineering jobs such as applying late, not seeking internships early on or lacking significant data points from peers and alumni network
- Designed 7-week pilot *fellowship* with 20+ workshops on personal branding, coding projects and technical interviews, while hearing from 10+ recent SWEs and incentivizing teamwork via open-source project, mock interviews and a hackathon
- Directed **product marketing** by posting on Linkedin, Instagram and Facebook reaching 10K+ impressions with 400+ live attendees in 5+ pre-launch events featuring recruiters and live coding, resulting in **$12K+ revenue** for July 2021 launch
- Assessing *fellowship* success by tracking **KPIs** such as Zoom attendance, resume reviews, mock interviews, interviews landed and offers received, while doing data analysis on team dynamics based on ambition, participation and college year
- Owning **product road mapping** for 3 engineers building video platform with 5-day watch limit and gamified cohort analytics

CHRONO GROUP - *PRODUCT MANAGER, New York, NY* — *Oct 2019 - Aug 2020*

- **Ideated** and owned 4+ applications with payment walls for local businesses bringing SEO ranking to **top-3 Google Search**
- Led team of 4 developers using agile methodologies (scrum) to develop chronogrp.com using React, Node, AWS

CAPITAL ONE - *SOFTWARE ENGINEERING INTERN, Dallas, TX* — *Feb 2019 - Aug 2019*

- **Pushed** geo-fence feature to app that generated **$1Bn+** in car loans notifying users when <300meters of bookmarked cars
- Created an algorithm to optimize user movement during app product launch; a solution around Apple's location limitations

TEDx - *FOUNDER, DIRECTOR, New York, NY* — *Aug 2016 - Aug 2017*

- Spearheaded first TEDx in the largest US high school (5.8K+ students) by **leading 4 teams**, resulting in 180+ attendees
- Prepared keynotes from 40+ tryouts and **raised $1.5K+** for event focused on the shift in communication in the modern era

HACKATHONS

12 HACKATHON WINS — *Oct 2018 - June 2021*

- Launched 10+ iOS apps with an average **7+ hours spent on ideation and** 15+ hours spent on design and development
- Investigated **user segment** pain points and created persona **customer journey** when pitching touch-feel interactive demos
- Implemented novel features like peer payments, 360 maps, voice AI with design patterns like singleton classes, MVC, etc

1st Place NYU Hack / Best Design by Facebook / *390+ UG STUDENTS* / Linkedin Post (80K+ views) — *Mar 2020*

- *RESEARCH / HYPOTHESIS* : raise capital for small businesses from everyday retail investors for equity
- Built a real-time payments by using Stripe API which can be used from Apple wallet / Apple watch

1st Place Estée Lauder Hack / Prize: $7,500 / *270+ UG AND PROFESSIONALS* / Final Pitch Youtube — *Oct 2019*

- *RESEARCH / HYPOTHESIS*: recycle makeup bottles and redeem points for 35+ Estée sub-brands' products
- Created back-end communication on Google Cloud between B2B Store Kiosk App and B2C User App

1st Place Cornell Hack / Prize: Meet Bill Clinton / *320+ UG STUDENTS* / Featured IBM Blog — *Sep 2019*

- *RESEARCH / HYPOTHESIS*: connect NGO events with bachelor/bachelorette volunteers for Hurricane Harvey
- Developed asynchronous listeners that trigger push notifications when in 200 meter radius of NGO event

EDUCATION

The Product School Bootcamp, Product Management Certificate — *Sep 2021*

- Product Road Mapping, Product Management, Product Development, Product Strategy, Product Marketing, Product Launch

The City University of New York (CUNY), **Queens College,** Bachelors of Arts in Computer Science — *Aug 2017 - Aug 2020*

- NYC Mayor Demo (public wi-fi project) , Economics Scholar (4 selected from 880+), University Endowment Speaker

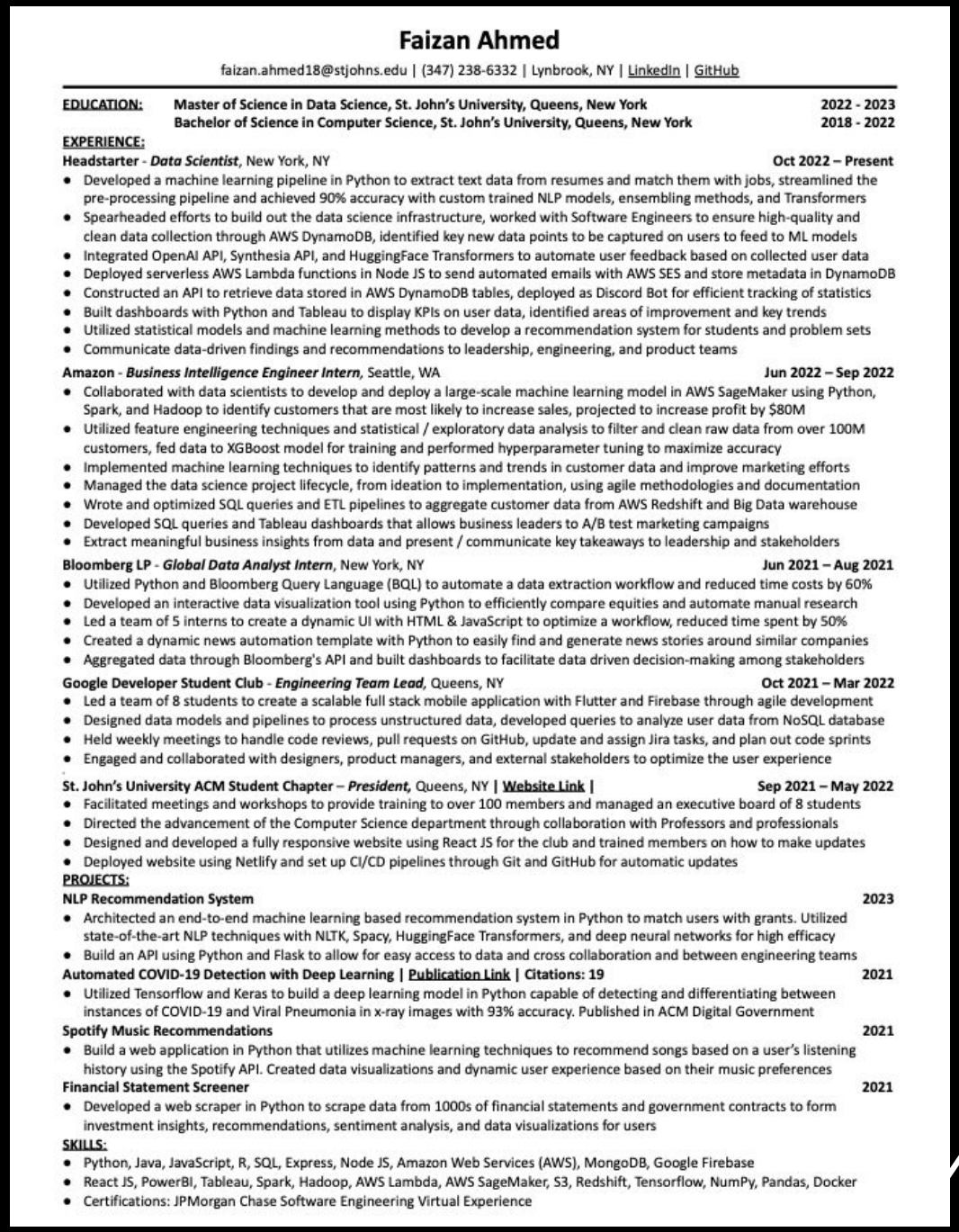
SKILLS & ADDITIONAL INFORMATION

Product: Teamwork, Delegation, Stakeholder Management, Leadership, Market Research, UI/UX Design, Agile (Scrum, Kanban), Big Data
Technical: *Tools* - Tableau, Snowflake, Google Analytics, Jira | *Programming* - JavaScript (5 yrs), Python (3 yrs), Swift (3 yrs), SQL (2 yrs)
AWS Certs: Amazon **Solutions Architect** Associate, Amazon Developer Associate, Amazon **Machine Learning Specialty**

Activities: *FACEBOOK* Above and Beyond Computer Science Fellow | Impact Labs Entrepreneur Fellow (<5% acceptance) | ***Google Cloud*** Student Innovator ($15K cloud credits distributed) | CUNY Tech Prep (web bootcamp) | CodePath (iOS Bootcamp) | National Science Foundation (funded project) | Coding for Dummies (President, High School) | Young Entrepreneurs Association (President, High School)

Faizan's Resume

- Education Section
- Experience Section
- Projects Section
- Skills Section



Faizan Ahmed

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EDUCATION:

Master of Science in Data Science, St. John's University, Queens, New York — **2022 - 2023**
Bachelor of Science in Computer Science, St. John's University, Queens, New York — **2018 - 2022**

EXPERIENCE:

Headstarter - ***Data Scientist***, New York, NY — **Oct 2022 – Present**

- Developed a machine learning pipeline in Python to extract text data from resumes and match them with jobs, streamlined the pre-processing pipeline and achieved 90% accuracy with custom trained NLP models, ensembling methods, and Transformers
- Spearheaded efforts to build out the data science infrastructure, worked with Software Engineers to ensure high-quality and clean data collection through AWS DynamoDB, identified key new data points to be captured on users to feed to ML models
- Integrated OpenAI API, Synthesia API, and HuggingFace Transformers to automate user feedback based on collected user data
- Deployed serverless AWS Lambda functions in Node JS to send automated emails with AWS SES and store metadata in DynamoDB
- Constructed an API to retrieve data stored in AWS DynamoDB tables, deployed as Discord Bot for efficient tracking of statistics
- Built dashboards with Python and Tableau to display KPIs on user data, identified areas of improvement and key trends
- Utilized statistical models and machine learning methods to develop a recommendation system for students and problem sets
- Communicate data-driven findings and recommendations to leadership, engineering, and product teams

Amazon - ***Business Intelligence Engineer Intern***, Seattle, WA — **Jun 2022 – Sep 2022**

- Collaborated with data scientists to develop and deploy a large-scale machine learning model in AWS SageMaker using Python, Spark, and Hadoop to identify customers that are most likely to increase sales, projected to increase profit by $80M
- Utilized feature engineering techniques and statistical / exploratory data analysis to filter and clean raw data from over 100M customers, fed data to XGBoost model for training and performed hyperparameter tuning to maximize accuracy
- Implemented machine learning techniques to identify patterns and trends in customer data and improve marketing efforts
- Managed the data science project lifecycle, from ideation to implementation, using agile methodologies and documentation
- Wrote and optimized SQL queries and ETL pipelines to aggregate customer data from AWS Redshift and Big Data warehouse
- Developed SQL queries and Tableau dashboards that allows business leaders to A/B test marketing campaigns
- Extract meaningful business insights from data and present / communicate key takeaways to leadership and stakeholders

Bloomberg LP - ***Global Data Analyst Intern***, New York, NY — **Jun 2021 – Aug 2021**

- Utilized Python and Bloomberg Query Language (BQL) to automate a data extraction workflow and reduced time costs by 60%
- Developed an interactive data visualization tool using Python to efficiently compare equities and automate manual research
- Led a team of 5 interns to create a dynamic UI with HTML & JavaScript to optimize a workflow, reduced time spent by 50%
- Created a dynamic news automation template with Python to easily find and generate news stories around similar companies
- Aggregated data through Bloomberg's API and built dashboards to facilitate data driven decision-making among stakeholders

Google Developer Student Club - ***Engineering Team Lead***, Queens, NY — **Oct 2021 – Mar 2022**

- Led a team of 8 students to create a scalable full stack mobile application with Flutter and Firebase through agile development
- Designed data models and pipelines to process unstructured data, developed queries to analyze user data from NoSQL database
- Held weekly meetings to handle code reviews, pull requests on GitHub, update and assign Jira tasks, and plan out code sprints
- Engaged and collaborated with designers, product managers, and external stakeholders to optimize the user experience

St. John's University ACM Student Chapter – ***President,*** Queens, NY | **Website Link** | — **Sep 2021 – May 2022**

- Facilitated meetings and workshops to provide training to over 100 members and managed an executive board of 8 students
- Directed the advancement of the Computer Science department through collaboration with Professors and professionals
- Designed and developed a fully responsive website using React JS for the club and trained members on how to make updates
- Deployed website using Netlify and set up CI/CD pipelines through Git and GitHub for automatic updates

PROJECTS:

NLP Recommendation System — **2023**

- Architected an end-to-end machine learning based recommendation system in Python to match users with grants. Utilized state-of-the-art NLP techniques with NLTK, Spacy, HuggingFace Transformers, and deep neural networks for high efficacy
- Build an API using Python and Flask to allow for easy access to data and cross collaboration and between engineering teams

Automated COVID-19 Detection with Deep Learning | Publication Link | Citations: 19 — **2021**

- Utilized Tensorflow and Keras to build a deep learning model in Python capable of detecting and differentiating between instances of COVID-19 and Viral Pneumonia in x-ray images with 93% accuracy. Published in ACM Digital Government

Spotify Music Recommendations — **2021**

- Build a web application in Python that utilizes machine learning techniques to recommend songs based on a user's listening history using the Spotify API. Created data visualizations and dynamic user experience based on their music preferences

Financial Statement Screener — **2021**

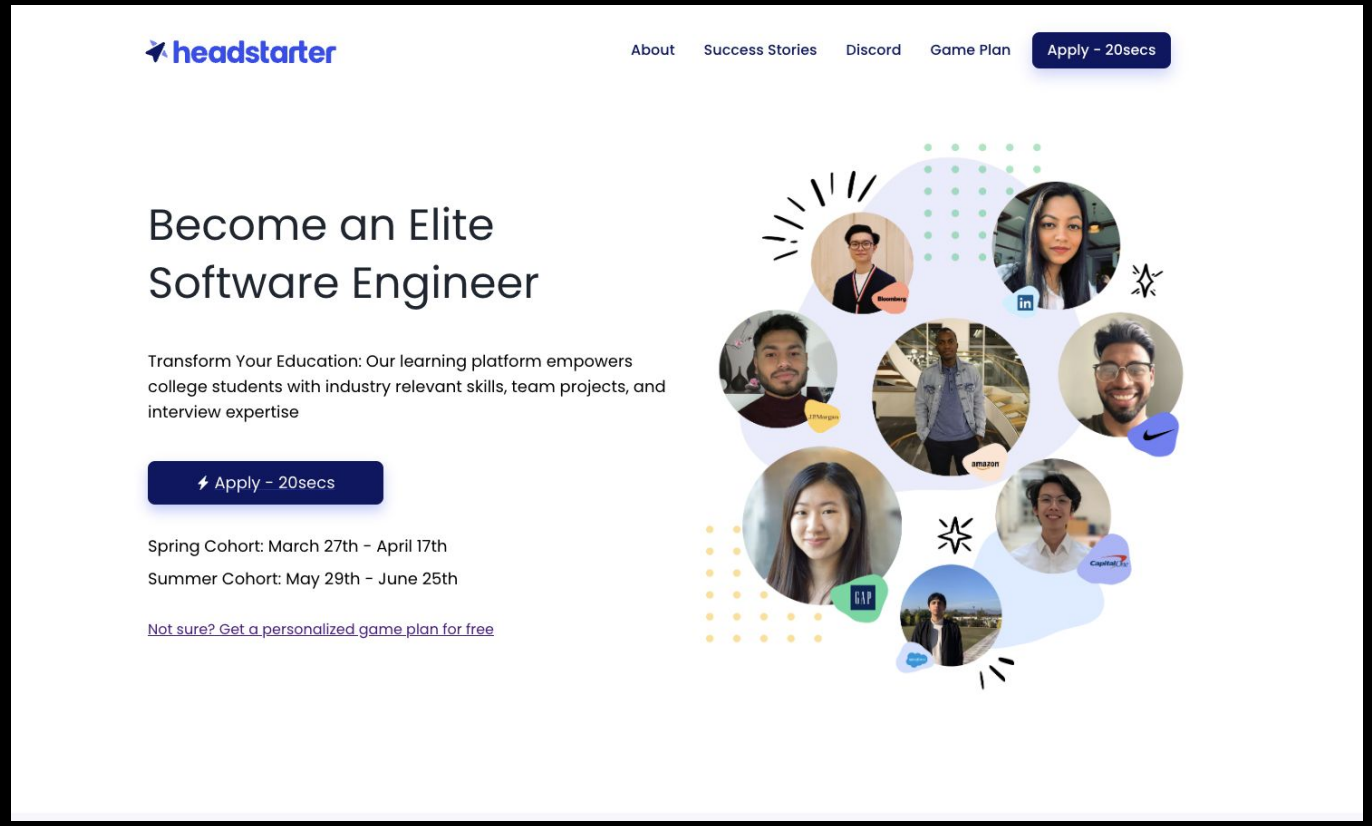
- Developed a web scraper in Python to scrape data from 1000s of financial statements and government contracts to form investment insights, recommendations, sentiment analysis, and data visualizations for users

SKILLS:

- Python, Java, JavaScript, R, SQL, Express, Node JS, Amazon Web Services (AWS), MongoDB, Google Firebase
- React JS, PowerBI, Tableau, Spark, Hadoop, AWS Lambda, AWS SageMaker, S3, Redshift, Tensorflow, NumPy, Pandas, Docker
- Certifications: JPMorgan Chase Software Engineering Virtual Experience

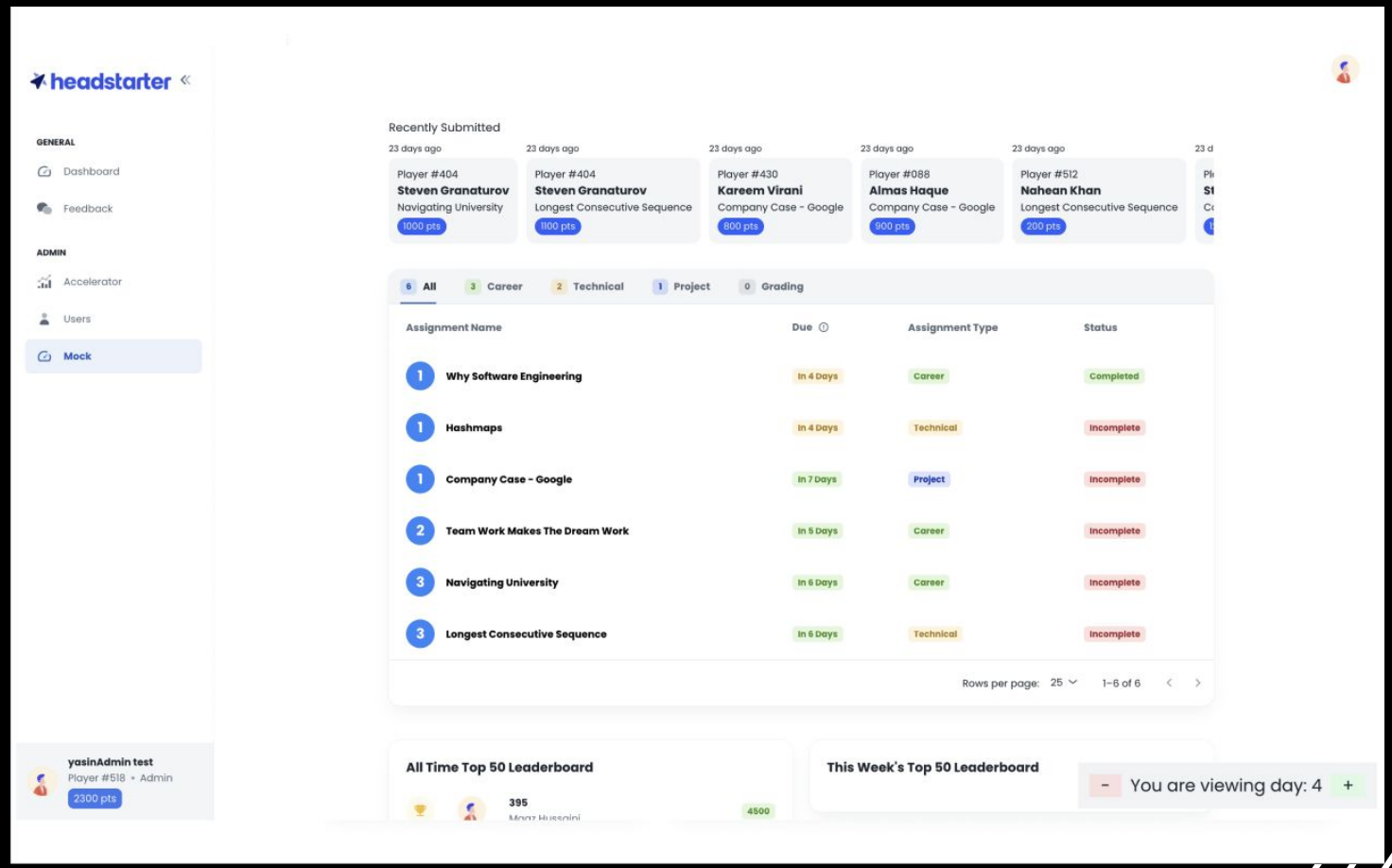
Headstarter Website

theheadstarter.com



Headstarter Platform

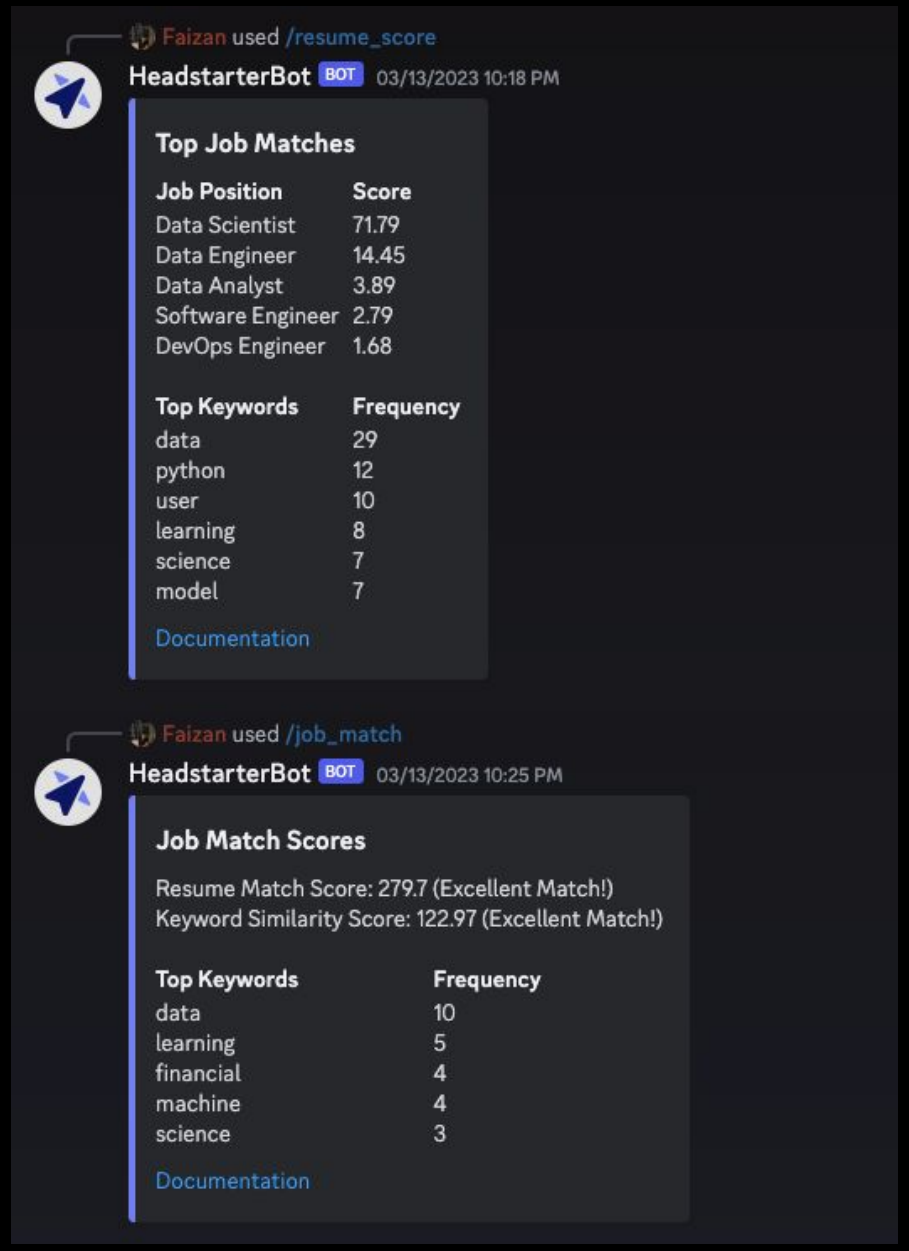
- Career & Technical Assignments, along with Projects



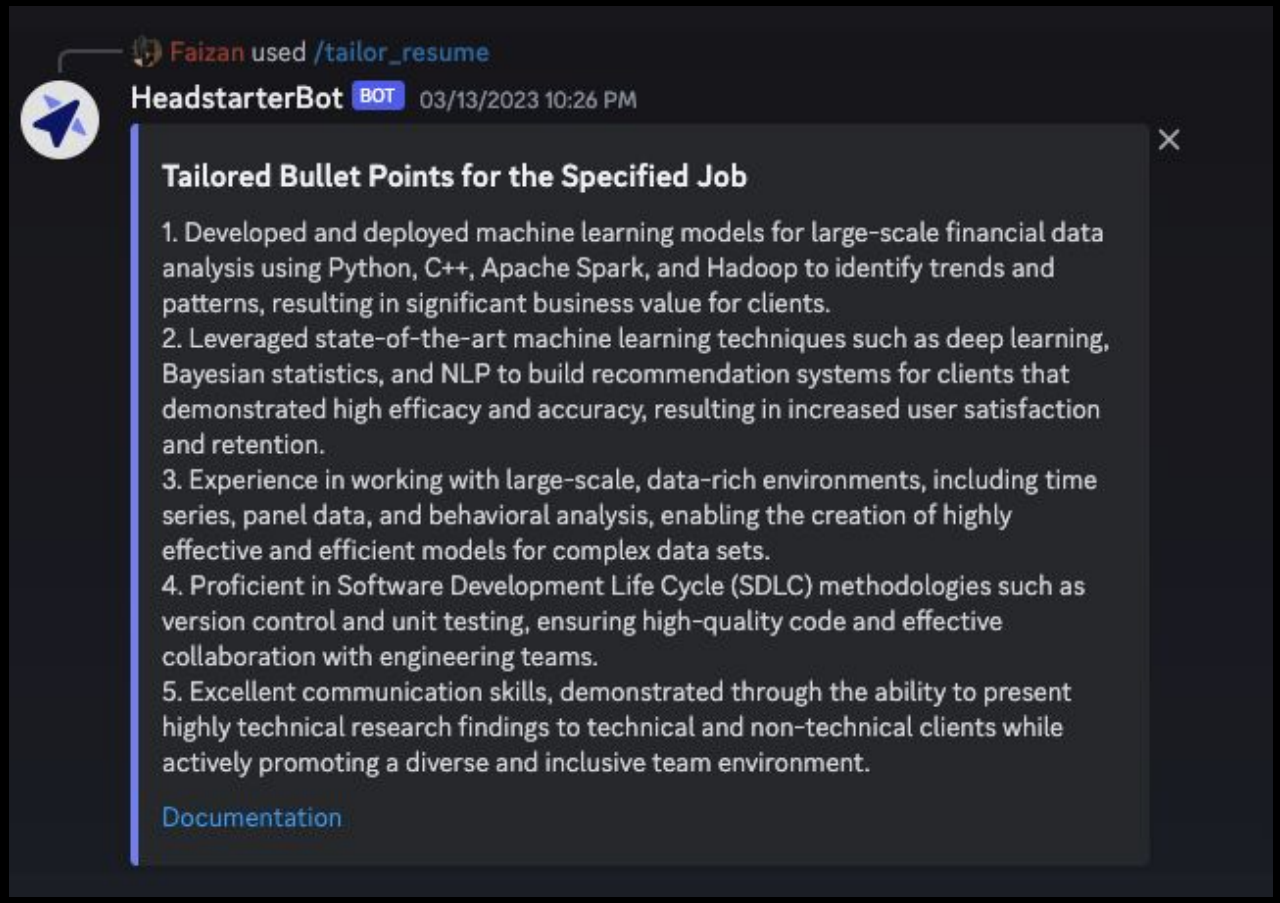
Winter 2023 Cohort

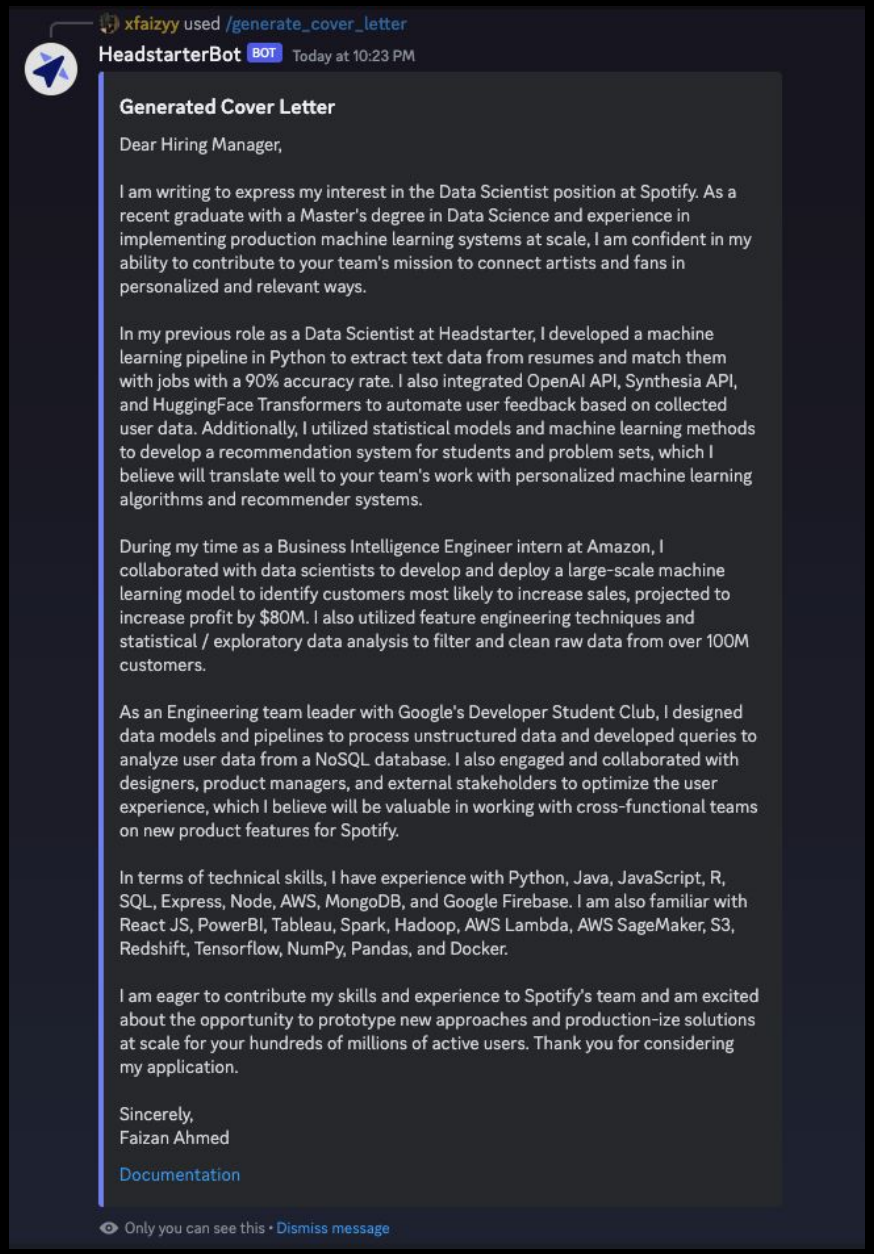
Headstarter Discord Bot

- Quantify how well your resume matches with certain job positions
- See how well your resume matches with a specific job



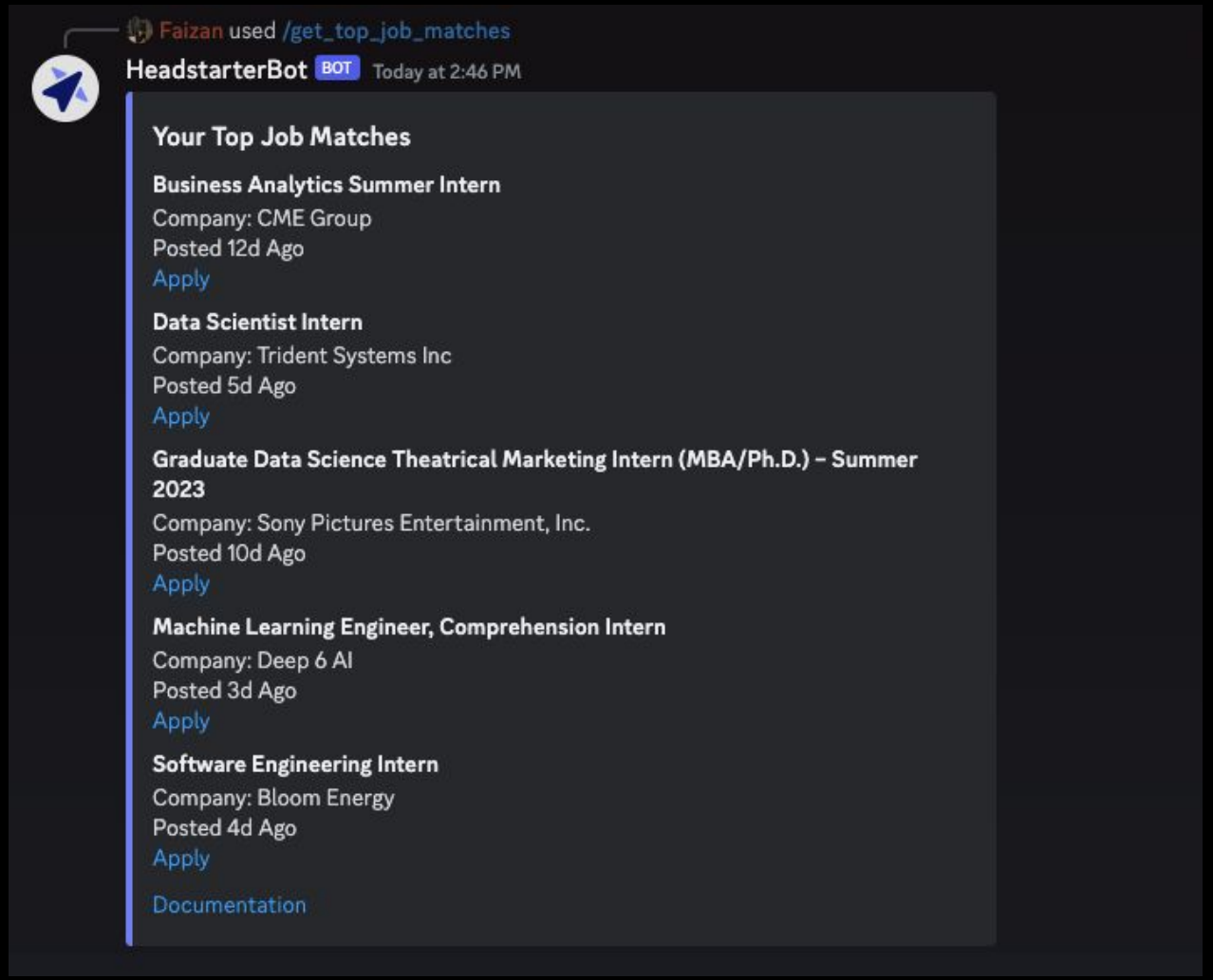
Headstarter Discord Bot





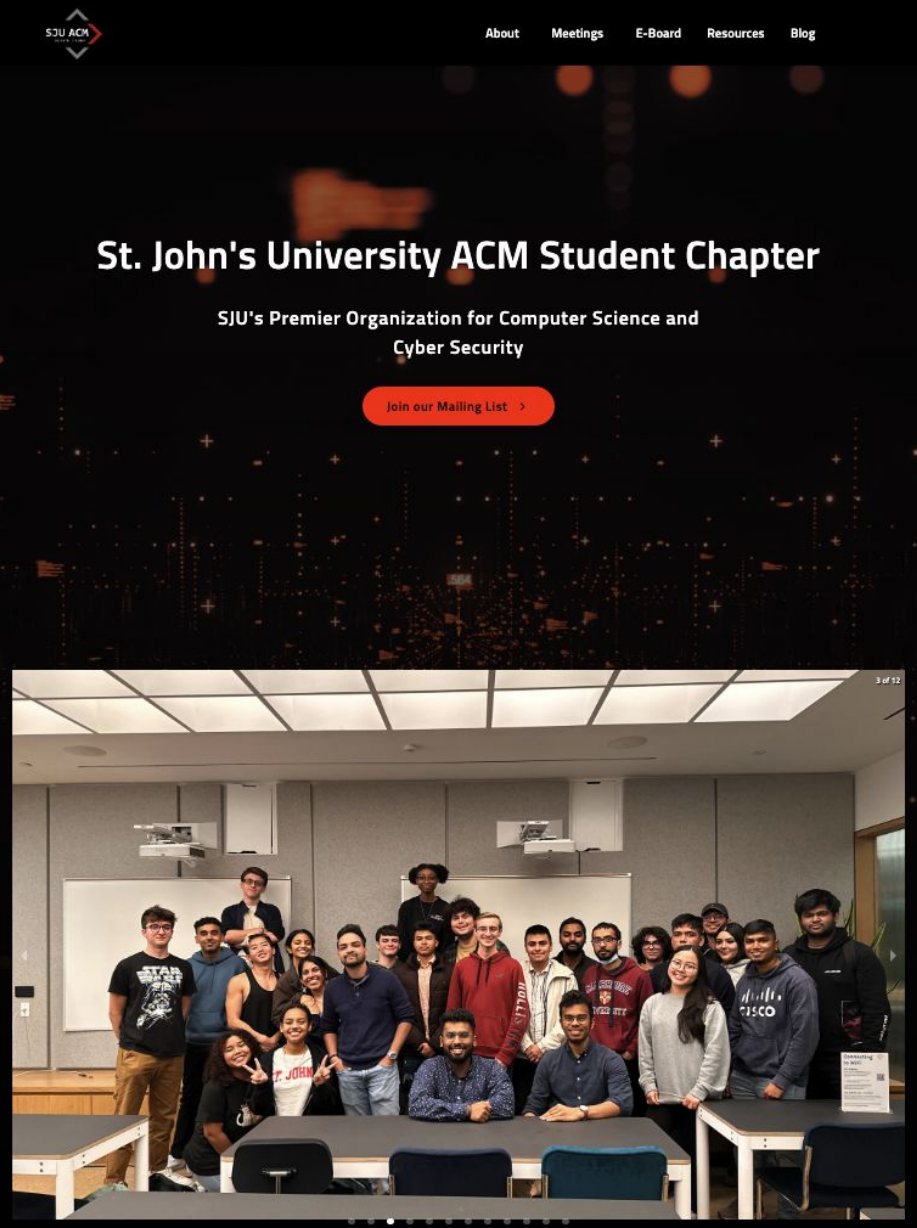
Headstarter Discord Bot

- Uses NLP to find the jobs that match the most with your resume
- Direct links to apply for each job!



SJU ACM Website

- sjuacm.com
- Slides & Recordings of all our meetings from the **past 3 years**!



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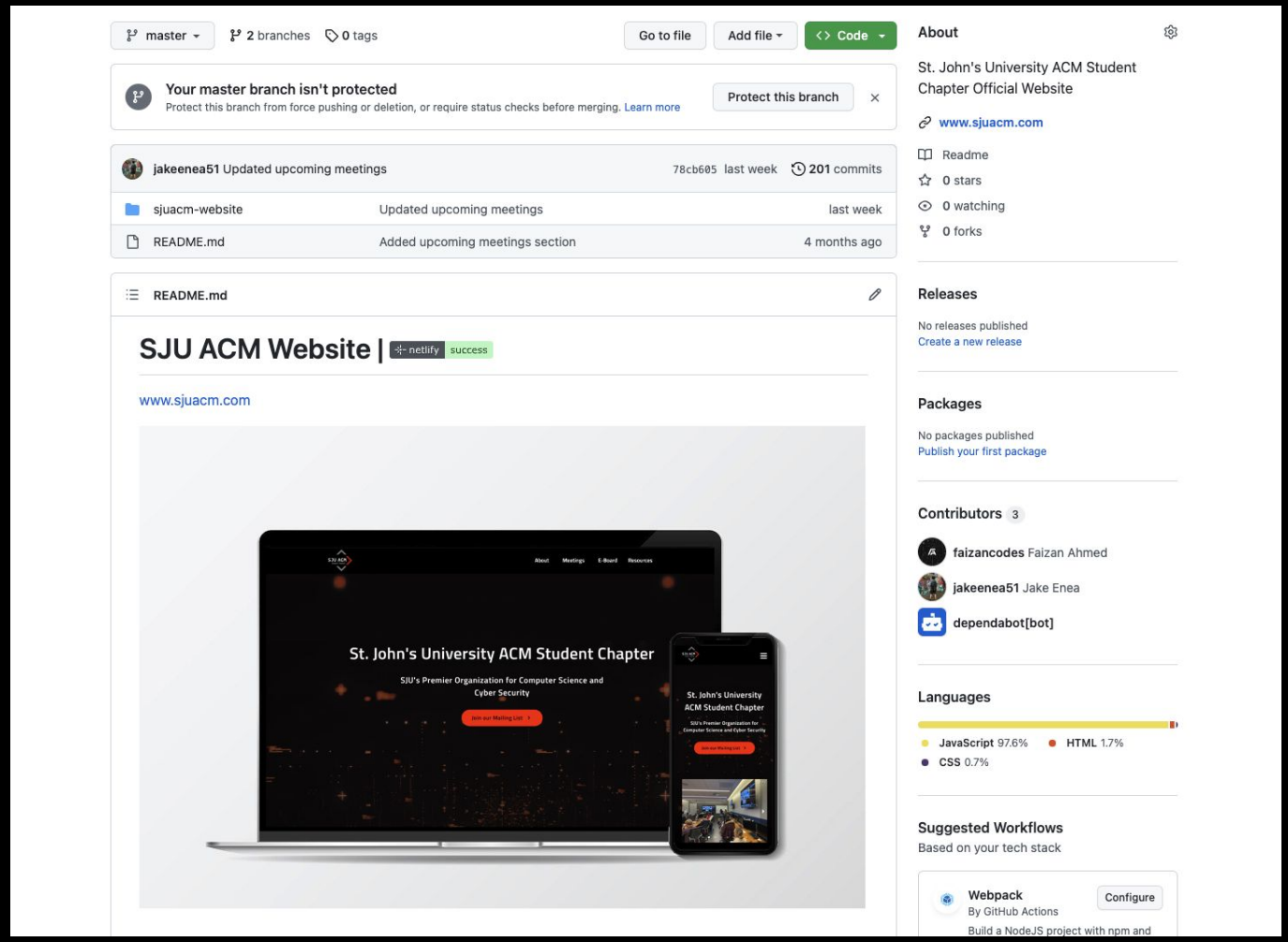
- Made with React JS, fully open source!
- View all the commits and changes to the code since inception