Parth Chopra

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EXPERIENCE

Twitter, *Software Engineer II – Revenue Optimization* | San Francisco, CA — *Jul. 2021 – Present*
- Led team of 6 to develop intuitive UI + API for mobile app advertisers to promote campaigns on Tweet Replies
- Shipped Replies ads feature with over 3000 advertisers currently onboarded and projected $120M ARR in 2023
- Developed tweet boosting pipeline in Scala, leveraging GraphQL to identify and uprank tweets by gaming partners
- Implemented major redesign in ad serving backend to expand the scope of compatible demand for ads on Replies
- Designed ETL data pipeline using Airflow and BigQuery to enrich user application data for creator monetization
- Authored several design docs for code changes at scale and wrote clean testing docs with monitoring dashboards

Twitter, *Software Engineering Intern* | San Francisco, CA — *Jun. 2020 – Sep. 2020*
- Led initiative to refactor *app-proxy*, a distributed Thrift service supplying app data for ads served on mobile/web
- Integrated new Manhattan R/W database to support rendering of app icons and screenshots for *app-proxy* clients
- Built Strato client interface in Scala with a caching layer backed by Kafka, improving p999 latency by factor of 15
- Launched app icon experiment for Android clients, leading to 5.9% increase in installs per click for mobile app ads

Berkeley SkyDeck, *Co-Founder, Bids Events* | Berkeley, CA — *Apr. 2019 – Dec. 2019*
- Designed and wire-framed complete user interface for compatibility with Xcode 11 and Android Studio
- Structured and managed NoSQL database (Firebase), deriving real-time user insights using Google Analytics
- Conducted usability testing and heuristic evaluations with Berkeley students for improvements in user experience
- Launched in Jan. 2019, securing over 8,000 student users at Berkeley; accepted into Y Combinator Startup School

Infinite Capital, *Data Science Intern* | San Francisco, CA — *Sep. 2018 – Mar. 2019*
- Conducted EDA using time-series data on crypto volume movements to identify trends and buy/sell indicators
- Presented moving average trends found for 10 different cryptocurrencies as interactive visualizations
- Designed unsupervised models to forecast price movements on early-stage PoS tokens by web-scraping Reddit feeds

SymphonyAI, *Software Engineering Intern* | Los Altos, CA — *Jun. 2018 – Sep. 2018*
- Improved current Lucene-based search backend (Elasticsearch) by targeting textual semantics in user queries
- Developed Python API with functionality in Apache Spark, improving search precision and recall by 17%
- Integrated NER model in current system pipeline to assist with automatic curation of patient health records

SKILLS

Languages/Libraries: Python, Scala, Java, JS/TS, C/C++, SQL, Go, React, Pandas, NumPy, Keras, Scikit-learn
Tools: BigQuery, PostgreSQL, Cloud Firestore, Azure/AWS, Flask, Guice, Docker, Linux, Git, Spark, Figma/Sketch

EDUCATION

University of California, Berkeley — *Aug. 2017 – May 2021*
B.S. Electrical Engineering and Computer Science — **GPA: 3.69**
- **Certifications**: SCET Certificate in Entrepreneurship & Technology, **Involvements**: Computer Science Mentors

PROJECTS

TakeTime: *React TS, Python (Flask, OAuth2), Cloud Firestore*
- Developed web app that integrates with Google Calendar and suggests dates to take PTO based on work schedule
- Stores user preferences for paid time off in Firestore database and easily exports confirmed dates off to calendar

bearMatch: *Python (Flask, Gunicorn), JavaScript, HTML/CSS, PostgreSQL*
- Created web service for students to meet potential crushes by sending anonymous 'like' emails from SMTP server
- Achieved 1500+ signups within 24 hours, with requests asynchronously handled and data written to Postgres DB

HONORS

United States of America Mathematical Olympiad (USAMO) Qualifier: Approximately 270 of the top scoring AMC 12 participants are invited (based on combined AMC 12 & AIME scores) to participate.
American Mathematics Challenge: Second place nationwide (Canada) for AMC 12 and three-time qualifier for the American Invitational Mathematics Examination (AIME), awarded to the top 2.5% of participants.