

# Aboudi Rai

Philadelphia, PA | [hi@aykae.com](mailto:hi@aykae.com)

Portfolio: [aykae.com/projects](https://aykae.com/projects) | GitHub: [aykae](https://github.com/aykae) | LinkedIn: [Aboudi Rai](https://www.linkedin.com/in/AboudiRai) | Twitter: [@aykae\\_r](https://twitter.com/aykae_r)

## EDUCATION

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### UNIVERSITY OF PENNSYLVANIA

M.S.E. in Computer Science (Graphics)

Relevant Coursework: Natural Language Processing, Cryptography, Engineering Entrepreneurship

Philadelphia, PA

Aug 2022 - May 2024

### THE PENNSYLVANIA STATE UNIVERSITY

B.S. in Computer Science

GPA: 3.830/4.000; Honors: Cum Laude

Relevant Coursework: Systems Programming, Operating Systems, Machine Learning & AI, Database Management

State College, PA

Aug 2019 - May 2022

## EXPERIENCE

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### APPIAN CORPORATION

Software Engineer Intern, Site Reliability

- Worked on site engine resilience, using *Java*, *Kafka* & *Zookeeper* to enable reliable distributed event streaming for **200+ customer sites**, addressed several bugs and preventative measures in existing codebase
- Ported Grafana dashboards using *Typescript* & *PromQL* to display *Prometheus* times series' for **50+ Kubernetes** customer sites, facilitating monitoring of reliability metrics such as memory usage & automatic engine restart count
- Optimized site scaling architecture using engine-specific (e.g. content, analytics, etc.) *Kubernetes* pods rather than all engines per pod, enabling horizontal scaling & **reducing idle engine initialization by 97%**
- Pushed several hot fixes to production site engine w/ **< 1 hr turnaround**, preventing downtime on **200+** live customer sites
- Prototyped built-in image search + effects API for low-code app builder using *OpenCV* & *Django*, won **1st place** intern hackathon, proposed feature added to app builder product roadmap

McLean, VA

Jun 2021 – Aug 2021

### TRYBER

Co-Founder, CTO

- Owned all aspects of technical design & development of flagship app, *EasyA* (**7.5k+ installs**), i.e., iOS, backend, DevOps
- Developed content writing web interface in *Django* allowing my CEO to write **800+ course topic reviews and quiz questions** in *LaTeX*, directly populated into our *SQLite* content database without my technical oversight
- Designed iOS frontend w/ *Photoshop* and implemented using *Swift* & *UIKit* providing an engaging and intuitive UX
- Networked iOS app to *Django REST Framework* content API w/ *Alamofire*, HTTP wrapper for requesting text & image
- Deployed backend site to *AWS EC2* instances for ease of scaling and reliability, *S3 buckets* for high-availability image storage for when iOS client app downloads review content

Hasbrouck Heights, NJ

Jun 2020 – Aug 2022

### FRANKLIN DAO

Software Engineer, Blockchain

- Building AMM arbitrage bot w/ *Solidity*, *Typescript*, *Hardhat* to create efficient DEX markets & generate [FDAO](#) profits
- Tracking **5,000+ Uniswap V2/V3** swap pairs w/ *Typescript SDK*, streaming mempool txns w/ *Alchemy RPC Node* for backrunning opportunities, streaming *Flashbots MEV-Share* orderflow for frontrun-protected txn submission
- Designed parametric DeFi insurance protocol using *Solidity* and *Chainlink functions* to enable permissionless claim payouts; awarded *Best DeFi Project*, *Best Use of Chainlink Functions* at [Penn Blockchain Hackathon 2024](#)

Philadelphia, PA

Sep 2023 – Present

### ABC FITNESS

Software Engineer Intern, Automation

- Automated gym membership freeze mechanism w/ *Python NLTK* sentiment classifier to drastically reduce manual employee review during COVID-19 **influx of 100,000+ freeze requests**
- Wrapped membership freeze mechanism w/ *Django Rest Framework* API allowing integration of ML classifier into existing *UIPath* automation pipeline

Dallas, TX

Jun 2020 – Aug 2020

## SKILLS + INVOLVEMENT

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**Technical Skills:** Python, Django, DRF, Java, Kafka, JavaScript, TypeScript, Solidity, Swift, C++, Git, AWS, CircuitPython

**Awards:** Penn Blockchain Hackathon 2024 (**Best Defi Project**), Appian 2021 Intern Hackathon (**Winner**)

**Orgs:** Developer for [FranklinDAO](#); Contributing Writer for [Fenjan Magazine](#); Social Media Editor for [Onward State](#)