# **KYLE REYES**

## Website | Email | LinkedIn | GitHub | (862)-596-4566

## **EDUCATION**

#### Brown University, 4.00/4.00 GPA

Providence, RI | Expected May 2023

- Sc.B. Mathematics-Computer Science
- Courses: Applied ODEs, Complex Analysis, Deep Learning, Real Analysis I-II, Honors Linear Algebra, Honors Multivariable Calculus, Honors Statistical Inference I, Theory of Probability I
- Activities: 2-year co-captain of men's fencing team, former TA for 2 computer science courses

#### PROGRAMMING EXPERIENCE

## Twitter, Engineering Intern

New York, NY | Jun – Aug 2022

- Refined search results to always suggest the account whose username matches the exact search query
- Improved customer experience by implementing tickets and various requests using Scala, Java, and React

## **Amazon**, Software Development Engineer Intern

Seattle, WA | May – Aug 2021

- Migrated a batch job used for the Amazon Prime Rewards Visa Card to an AWS infrastructure (CDK, CloudFormation, CloudWatch, Fargate, S3, VPC, SecretsManager)
- Lowered cost, enhanced security, resolved potential conflicts with other batch jobs using Java and TypeScript

## **Soham Sankaran**, Software Engineer Intern

Jun - Aug 2020

- Co-built Moodplex, a web app that produces social media post rankings based on user comparisons
- Acquired trending posts from Twitter, Reddit, YouTube, Imgur, and Hacker News APIs using Go that was then stored in a PostgreSQL database
- Managed frontend using HTML, CSS, and JavaScript

## **SKILLS**

Languages: Java, C, C++, Python, Go, OCaml, Racket, Scala, HTML, CSS, JavaScript, TypeScript, SQL, Bash, LaTeX, x86 Technologies: AWS, Docker, GDB, Git, NumPy, TensorFlow, Wireshark | Foreign Language: Filipino (Fluent)

## **COMPUTER SCIENCE PROJECTS**

IP (Spec) + TCP (Spec) Feb - May 2022

- Designed an abstract link layer using UDP and implemented the IPv4 protocol in a group of two using Go
- Supported routing through a modified version of RIPv2 with split horizon, poison reverse, and triggered updates
- Built a TCP implementation with a state machine, sliding window protocol, and zero window probing

Dropbox (Spec) Mar - Apr 2021

- Designed a stateless client for a secure file sharing and storage system in a group of two using Python
- Utilized provided symmetric & asymmetric encryption schemes, digital signatures, hash functions, HMACs, and random byte generators to meet security requirements

## ParselTongue (GitHub, Demo)

Apr - May 2020

- Built a smart PageRank-based research paper parsing tool for Software Engineering final group project
- Implemented intelligent PDF text parsing using Java (other technologies used: Freemarker, Spark, MongoDB)