# Rock Zhou

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## SKILLS

- **Languages:** Javascript/Typescript, Python, C++, SQL, Java
- **Tools/Frameworks:** React, Node, GraphQL, Flask, Docker, AWS, Terraform, Git, Unix

## EDUCATION

**University of Waterloo** ✳ Bachelor's of Computer Science, 3.6 GPA

## EXPERIENCE

**January** ✳ Software Engineer                                                      *Mar 2023 – Present*

- Led the integration of a third-party payment provider using Flask and GraphQL as one of two engineers. Collaborated on product requirements by writing a technical design document and running an RFC meeting. Achieved a 30% increase in payer conversion rates by enabling Apple Pay for users.
- Served as the tech lead for the integration of AWS EventBridge Scheduler for compliance-mandated outreach scheduling. Implemented monitoring with Datadog and comprehensive automated and manual testing. Enabled 10,000 daily scheduled email sends and reduced complaints by 10%.
- Resolved long-standing issues in NPM package configuration, eliminating dependency conflicts and enabling upgrades to critical tools like Typescript and ESLint. Conducted thorough research, resolved conflicts, secured team-wide support, and led the team in a comprehensive manual testing before deploy.
- Integrated UserSnap, a third-party survey service into the application. As part of the project, mentored a new engineer during their onboarding, delegating tasks to them to facilitate their familiarity with the codebase. Collected over 10,000 responses in six months, informing future product decisions.

**Meta** ✳ Software Engineer                                                           *Sep – Nov 2022*

- Streamlined internal privacy review process by adding functionality in PHP, React, and GraphQL to allow privacy managers to update linked privacy tasks directly from a dashboard.
- Refined internal meeting workflows for >80000 employees by implementing screen-share pausing functionality in Messenger Video Calls using React Native and C++, which was released internally.

**Tesla** ✳ Software Engineer Intern                                                    *May – Aug 2021*

- Bolstered efficiency of part inspection and production line error analysis for engineers and technicians by over 50% by developing an all-in-one internal platform in React and GraphQL.
- Improved specificity of security across internal apps by implementing keyword and role based permissions using Node and AWS Lambda.

**StackAdapt** ✳ Software Engineer Intern                                               *Jan – Apr 2021*

- Expanded potential client access to more than 150 million users on Spotify and SoundCloud by building out targeted audio ad campaign functionality in Ruby on Rails and React.
- Created a master demo account environment to enhance sales team workflows and improve customer acquisition success, helping to achieve 1000 active ad campaigns.

**KitchenMate** ✳ Software Engineer Intern                      *May – Aug 2020, Sep – Dec 2019*

**ConsenSys** ✳ Software Engineer Intern                        *May – Aug 2018, Jan – Apr 2019*

## PROJECTS

**EEG Seizure Classification** ✳ github.com/rocky1638/eeg-seizure-detection          *May 2020*

- Classified seizures through EEG frequency data, using transfer learning with ResNet18 to achieve classification accuracy of 70%, placing 4th among participants in the Neureka 2020 challenge.
- Preprocessed data using NumPy and PyTorch, using short-term Fourier transform (STFT) to extract frequencies and amplitudes, creating frequency/time heat-map for CNN input.