

# Philip Clement

<https://pclem803.github.io> | [philipclement2022@u.northwestern.edu](mailto:philipclement2022@u.northwestern.edu) | 210-355-4533

## EDUCATION

**Northwestern University**, Evanston, IL  
B.S. in Computer Science | 3.76/4.00 GPA

*Expected Graduation* June 2022

**Relevant Coursework:** Agile Mobile/Web Development, Rapid Prototyping, Machine Learning, Computer Systems, Advanced Algorithms, Discrete Mathematics

## INDUSTRY EXPERIENCE

***Auth and Security Software Engineering Intern - Relativity*** June - September '20

- Worked on the Agile development of two Security-Tier 0 applications responsible for the authentication of over 180,000 users
- Pioneered research and prototyping of a custom Relativity implementation of cutting-edge FIDO2 technology in IdentityServer4
- Engineered an un-phishable, passwordless authentication ceremony consistent with OAuth2, OpenID Connect, and FIDO Alliance protocols
- Enhanced Relativity's Two-Factor-Authentication from basic Email/SMS to support modern TFA authenticator apps
- Orchestrated configuration and deployment of Unit-Tests to support renovated TFA Aurelia.js workflows using Karma and Jasmine with a code coverage above 90%
- Designated team subject matter expert on issues pertaining to JavaScript

## ENGINEERING PROJECTS

***One House - Collaborative Project*** November - December '20

- Collaborated with four students in Agile Sprints to develop a shared shopping list web and mobile application in React.js
- Devised workflow for integrated user payment utilizing receipt scanning and user notification using Twilio SendGrid API
- Built an adaptive frontend interface, including controlled forms, using React, React Native, and RBX component library
- Handled sensitive user profile and shopping list data using OAuth2 protocol for login and Firebase JSON-databasing for storage

***Carousel - Collaborative Project*** August - Present '20

- Controlled the agile development of a React Native messaging app by organizing and leading the team's weekly SCRUM meetings
- Designed chat app architecture using MongoDB databasing, Socket.IO and Express servers, and Node.js backend

***Bubble Calendar - Personal Project*** October - December '19

- Created calendar application with custom MongoDB Schemas and automated email reminders using the Twilio SendGrid API
- Built RESTful APIs to handle client JSON requests using a Node.js Express server hosted with Heroku cloud compute
- Secured client-server communication with JSON authentication tokens stored through browser cookies
- Stored salted passwords, user profiles, and data on a NoSQL MongoDB Atlas cluster

## LEADERSHIP EXPERIENCE

***President - Sigma Nu Fraternity*** January '20 - August '20

- Organized and facilitated difficult fraternity-wide conversations in response to the proceedings of COVID-19, the Black Lives Matter movement, and Northwestern's Abolish Greek Life movement
- Planned a three-pillar plan to reform Northwestern Fraternities, focusing on intentionally anti-racist recruitment, the removal of financial barriers, and dismantling of toxic/predatory practices
- Successfully lobbied Interfraternity Council to adopt the plan as a model for reform for Northwestern fraternities

***Founder of Student Investment Group (SIG) - Saint Mary's Hall*** June '17 - September '18

- Founded and managed Student Investment Group of over 100 students
- Oversaw the investing a \$20,000 real-money portfolio yielding a positive alpha of 8%

## SKILLS AND LANGUAGES

- **Front-end:** JavaScript, React.js, Redux, Aurelia.js, HTML/CSS
- **Back-end:** Node.js, SQL, MongoDB, C#, Python, RESTful APIs
- **Other:** Git, Jasmine and Karma Unit Testing, Agile Development, Public Speaking