Philip Clement

https://pclem803.github.io | philipclement2022@u.northwestern.edu | 210-355-4533

EDUCATION

Northwestern University, Evanston, IL   *Expected Graduation* June 2022
B.S. in Computer Science | 3.76/4.00 GPA

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 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
- 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
- Sucessfully lobbied Interfraternity Council to adopt 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, 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