

Philip Clement

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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 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 leveraging Twilio SendGrid API
- Built an adaptive frontend interface, including controlled forms, utilizing 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 agile development of a React Native messaging app by organizing and leading team's weekly SCRUM meetings
- Designed chat app architecture using MongoDB databasing, Redux, 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 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, removal of financial barriers, and dismantling of toxic/predatory practices
- Successfully 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 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