

Kevin Chou | Full-Stack Developer

t: 650.455.9288 | e: this.kevinchou@gmail.com | a: San Francisco, California | [Website Portfolio](#)

Skills | React.js, Redux, JavaScript, Python, Ruby, Rails, SQL

Work Experience

Software Developer, Actuarial Science | 2016 - 2019 | Visual Basic, Fortran, SQL, SQLite3, MS Access, ORM, TDD

Nicolay Consulting Group | San Francisco, CA | 2018 – 2019

Willis Towers Watson | Dallas, TX | 2016 - 2018

- Revamp/Maintain client codebases & databases to improve reliability, maintainability and scalability of system
 - Design and implement data pipelines to batch process valuation data into analytics database
 - Program processes to import/export, test/validate & apply assumptions to data, calculate liabilities and produce financial reports
 - Review/refactor code for accuracy, readability and time-efficiency **cut run-time from 12 to 4 hours
 - Convert valuation programming from legacy systems to new software systems & spreadsheet data/functions to backend/database technologies
 - Create documentation explaining how to use programs, limitations of programmatic design and technical/actuarial issues to be aware going forward
- Develop in strict ACID & Transactional environment due to analytical & calculative nature of actuarial science
- Perform annual retirement valuations in accordance with ERISA, FASB, GASB, IAS19
 - Analyze results via data reconciliation, data testing/validation and gain/loss analysis
 - Develop and analyze results of forecasting projects, experience studies and special accounting events
- Train analysts on actuarial concepts, technical & programming skills, accounting standards & IRS legislation
- Recognized by peers by vote for individual contributions in 2017

Web Development Projects

[Want.com](#) | JavaScript, PostgreSQL, Ruby / Rails, React / Redux, Ajax, HTML5, CSS3, Webpack, Heroku

- Clone the style and functionality of the e-commerce website Wish.com; features include adding reviews, editing items to shopping cart and searching products by name & theme
- Utilize React routing dom and withRouter to control navigation around SPA
- Implement user authentication pattern with BCrypt hashing
- Implement infinite-scroll to fetch products from server to mimic index page
- Use conditional state with Redux state on front-end to toggle modal show pages, user login & profile

[3d-Minesweeper](#) | JavaScript, ThreeJS, ThreeJSx, Canvas, HTML, CSS

- Utilize a graph data structure and recursive search algorithm to identify adjacent vacant cubes
- Integrate ThreeJS libraries to apply custom event handlers with raycasting to interface cube objects
- Apply first-person controls to allow user navigation through the 3d environment

[Multi-Go](#) | JavaScript, MongoDB, Express.js, React / Redux, Node.js, HTML5, CSS3, Canvas, WebSockets, Heroku

- Create a game server to play variations of the classical board game Go; Custom game settings include variable number of players, board sizes and grid layouts
- Synchronize lobby page, chat messaging and move coordination via websocket and Axios requests

Freelance Engineering Projects

Automation and Web-Scraping | 2015 - 2019 | Visual Basic, XML **reduced daily time spent from hours to minutes

- Develop program to scrape data for 200+ packages daily from DPD International Tracking Service
- Develop program to scrape data from sites Farfetch, Net-a-Porter & SSENSE via XML HTTP requests
- Develop program to update the master inventory spreadsheet from daily orders
- Develop program to scrape data for 400+ stocks and options from Yahoo and Google sites, to screen and make trade/hedge decisions according to Black-Scholes theory

Education | University of Southern California | Bachelor of Arts in Economics | Los Angeles, CA