

Becky Wu

Full Stack Engineer

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Summary

- A highly skilled and motivated Full Stack Engineer with over 6+ years of experience in web development. Proficient in both frontend (Angular, HTML, CSS, JavaScript) and backend technologies (Python).
- Extensive experience with Angular versions 4 and above, utilizing its powerful features such as modular architecture, component-based development, and dependency injection.
- Proficient in implementing reactive programming and state management using **RxJS** and **NgRx** for efficient data flow and application state management.
- Strong understanding of **Angular routing, form handling, and validation** techniques, allowing for seamless user interactions and data handling.
- Experience with data visualization libraries in **D3.js, Chart.js, Highcharts**, for creating interactive and visually engaging data representations.
- Familiarity with UI component libraries like **Angular Material, PrimeNG, and Ant Design** for rapid and visually appealing UI development
- Proficient in server-side development using **Node.js** and frameworks like **Express.js** and **Nest.js**, leveraging their capabilities for building scalable and efficient APIs.
- Knowledge of **RESTful API** design principles and **GraphQL** for efficient data retrieval and manipulation.
- Familiarity with web security practices, such as implementing **JWT** authentication and **OAuth 2.0** to ensure data privacy and system security.
- Experience with integrating third-party services and APIs, including **capturing electronic signatures, generating PDF reports, payment gateways, geolocation services, and notification services**.
- Proficient in working with databases like **MongoDB**, utilizing ORMs like **Mongoose** for efficient data modeling and retrieval.
- Familiarity with SQL databases like **MySQL**, enabling the ability to work with relational data models and query languages.
- Proficient in deploying and managing applications on cloud infrastructure using platforms like **AWS** (Amazon Web Services) and **Azure**, with familiarity in services such as **AWS Lambda** and **S3**.

- Proficient in **Python**, with experience in data analyzing. Skilled in using Python libraries like **NumPy** for data analysis, manipulation, and statistical computations.
- Proficient in using **Git** for version control, including repository management and branching strategies. Familiar with GitHub for collaborative development and code review.
- Practiced in **Agile** development methodologies, including **Scrum** and **Jira**. Experienced in participating in sprint planning, daily stand-ups, and retrospectives for effective project management.
- A proactive and adaptive problem solver, capable of thriving in fast-paced and challenging environments.

Skills

- **Programming Languages:** JavaScript, Typescript, HTML, CSS, SASS, Python, Java, Kotlin, C++, Appium, Selenium, Spark
- **Web Technologies:** Angular, RxJS, NgRX, Node.js, Nest.js, React, Angular Ionic
- **Databases:** MySQL, MongoDB, Mongoose
- **Cloud:** AWS Lambda, AWS S3, Azure
- **Version Control:** Git, Github, Gitlab
- **Project management:** Agile, JIRA
- **Testing:** Jasmine, Karma, Postman, Playwright

Work Experience

CityMD

Electronic Medical Records System | New York City, NY | Oct 2022 - Now

CityMD is an urgent care provider with multiple locations across the city. Their clinics offer convenient and accessible healthcare services for non-life-threatening medical conditions. Their medical staff provides comprehensive treatment for common illnesses, minor injuries, and infections.

- Designed and implemented the user interface using Angular 12, HTML5, CSS3, and TypeScript, ensuring an intuitive and user-friendly experience for medical staff.
- Designed and implemented responsive and dynamic user interfaces, incorporating UI component libraries using **PrimeNG** to enhance the user experience.
- Utilized **Reactive Forms** in Angular to handle data input and validation for patient information, medical history, prescriptions, and lab results.

- Utilized asynchronous programming techniques and **RxJS** observables to handle data retrieval and manipulation, providing real-time updates and seamless user interactions.
- Integrated third-party libraries or APIs for specific functionalities, such as **DocuSign API** for capturing electronic signatures, and **PDFMake** for generating PDF reports.
- Developed a robust **MongoDB** database schema, utilizing **Mongoose** for efficient data storage and retrieval of patient records, medical histories, prescriptions, and lab results.
- Implemented secure user authentication and role-based access control using **JWT**, ensuring privacy and data security for patient information and system functionalities.
- Utilized **Express.js** to build a robust and efficient backend for the Electronic Medical Records System. Implemented **RESTful APIs** to handle data interactions between the frontend and backend, enabling seamless communication and data synchronization.
- Integrated the Electronic Medical Records System with external systems and medical devices using **RESTful APIs**, enabling seamless data exchange and integration with diagnostic reports, test results, and digital imaging equipment.
- Utilized data visualization libraries **D3.js** to generate insightful reports and analytics on patient demographics, diagnoses, treatments, and outcomes, facilitating data-driven decision-making.
- Conducted comprehensive testing, including unit testing with **Jasmine**, end-to-end testing with **Playwright**, and API testing with **Postman**, to ensure the reliability, functionality, and performance of the EMR system.
- Conducting accessibility audits using **WAVE** to identify and address accessibility issues. Utilizing **Angular CDK Accessibility** features to enhance keyboard navigation and screen reader support.
- Collaborated with the development team using **Git** for version control, participating in code reviews, and following **CI/CD** practices with **Azure DevOps** for smooth deployment and release cycles.

Choc O Pain

Order system | Jersey City, NJ | Feb 2022 - Sept 2022

Choc O Pain is renowned for exquisite, homemade French baked goods. They offer a wide range of meticulously crafted chocolates as well as traditional French pastries. The bakery prides itself on using high-quality ingredients and traditional techniques to create delectable treats for chocolate and pastry lovers.

- Led the end-to-end development of the online ordering system for Choc O Pain French Bakery and Café, utilizing **Angular 12** for the front-end and the MEAN stack (MongoDB, Node.js) for the back-end.

- Implemented responsive and dynamic user interfaces using Angular framework, HTML5, CSS3, and TypeScript, ensuring cross-browser compatibility and accessibility.
- Designed and implemented modular and reusable components in Angular, following best practices such as component composition, data binding, and input/output decorators.
- Configured **Angular Routing** module to enable seamless navigation between different sections of the online ordering system, allowing customers to browse products, place orders, and view order history.
- Utilized Angular's services, observables, and **RxJS** library to manage application state, ensuring efficient data flow and synchronization between components.
- Implemented Angular's **reactive forms** to create dynamic and user-friendly input forms, with validation rules and error handling for data integrity.
- Utilized Angular's **HttpClient** module to handle HTTP requests and responses, enabling communication with the server-side APIs for retrieving menu data, submitting orders, and managing user authentication.
- Conducted **unit testing** using Angular's testing framework - Karma to ensure the reliability and functionality of the application components and services, and performed thorough debugging to identify and fix any issues.
- Integrated the backend server with frontend authentication, order management module using **Restful API**, implemented secure user authentication and authorization and ensure appropriate access control using **angular guards** and **JWT**.
- Collaborated with the team to created and optimized the **MongoDB** database schema, ensuring efficient storage and retrieval of data related to customer orders, menu items, user profiles, and transaction history.
- Utilized **Git** as the version control system to track changes, manage branches, and collaborate effectively with the development team.

Avis

Car Rental Management System | New York City, NY | Aug 2021 - Feb 2022

- Played a key role as a MEAN stack engineer in the development of the Avis Car Rental Management System, focusing on frontend development using Angular 10 and backend development using Node.js and Express.js.
- Translated business requirements into technical specifications and implemented responsive and user-friendly interfaces using Angular 10, HTML, CSS, and TypeScript, incorporating UI component libraries Angular Materia to enhance the user experience.

- Designed and developed **RESTful APIs** to support car inventory management, booking workflows, and customer registration.
- Leveraged **MySQL** for efficient storage and retrieval of car inventory data, customer information, rental history, and financial transactions, utilizing SQL queries and ORM frameworks - TypeORM for data access.
- Implemented secure authentication and authorization mechanisms using technologies like **JWT** and **OAuth 2.0**, ensuring the confidentiality and integrity of user data and protecting privileged functionalities.
- Integrated third-party services and APIs - **payment gateways** (e.g., PayPal), **geolocation services** (e.g., Google Maps API), and **notification services** (e.g., Twilio), to enrich the rental experience and streamline business operations.
- Conducted comprehensive testing of both frontend and backend components, including unit testing with **Jasmine**, end-to-end testing with **Protractor**, and API testing with **Playwright**, to ensure the reliability, functionality, and performance of the car rental system.
- Collaborated with the development team using **Git** for version control, actively participating in code reviews, adhering to branching and merging best practices.

ByteDance

Content Recommendation System | Beijing, China | April 2020 - July 2021

- Developed and maintained the frontend components of ByteDance's content recommendation system using **Angular 6**.
- Collaborated closely with the backend team to integrate APIs and ensure seamless communication between the frontend and backend systems.
- Implemented responsive and user-friendly UI features, leveraging Angular Material v6 and other UI libraries to enhance the user experience.
- Worked with UX/UI designers to translate design mockups into interactive and visually appealing frontend interfaces.
- Worked with **RESTful APIs** to retrieve and display content recommendations, optimizing performance and ensuring a smooth user experience.
- Assisted in backend development tasks, such as implementing **API endpoints** and **database interactions**, to support the overall system functionality.
- Conducted unit testing using **Jasmine** to verify the functionality of individual components and guarantee a robust system.

- Participated in **Agile** methodologies, including sprint planning, daily stand-ups, and retrospectives, to ensure efficient project management and timely delivery of features.

4399 Games

Games Box Development | Xiamen, China | June 2018 - March 2020

- Collaborated with the development team to build and maintain the frontend of the 4399 Games Box, a platform for accessing and playing a wide range of online games.
- Developed the frontend components using HTML5, CSS3, and JavaScript, ensuring cross-browser compatibility and responsive design for seamless gameplay across different devices.
- Utilized **RESTful APIs** provided by game developers to retrieve game data, including game names, descriptions, images, and categories, dynamically populating the Games Box interface.
- Integrated authentication mechanisms - **OAuth** and **JWT**, to allow users to create accounts, save game progress, and engage in social features like leaderboards and achievements.
- Implemented game launch and embedded features using **iframe**, ensuring a seamless transition from the Games Box platform to the selected game environment.
- Utilized **local storage** or **cookies** to store user preferences, such as language settings, game preferences, and personalized recommendations.
- Collaborated with the backend team to establish secure communication protocols and ensure data privacy by implementing **HTTPS** and **encryption techniques**.
- Conducted performance optimizations, including **image compression** and **lazy loading**, to enhance the loading speed and overall performance of the Games Box platform.