Brian Yu

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EXPERIENCE

ENCIV   **Irvine, U.S.**
Full Stack Developer   *July 2023 - Now*
- Built responsive React components using JavaScript and HTML5, incorporating NodeJS for backend integration, and adopting a microservices architecture, which enhanced modularity and scalability of the web applications.
- Integrated state management replacement in Redux, ensured efficient server-client synchronization.
- Upgraded UI development tools from Storybook 4 to Storybook 7 and resolved issues for improved application stability.

INTELLIGENT PRECISION INSTRUMENT   **Shenzhen, China**
Machine Learning Engineer   *Jan 2021 - Jun 2021*
- Developed detection algorithms and models to measure the positions, orientations, and flatness of more than 10 shapes at the pixel level with Python, OpenCV, TensorFlow, and scikit-learn, and achieved over 99.5% accuracy.
- Optimized the detection speed from 1 second to 0.2 seconds by implementing parallel processing and model pruning.
- Implemented APIs and frameworks to add deep learning generated intelligence to our software, empowering automated visual quality checks on products such as Apple Vision Pro batteries and BYD electronic components.

GZY INFORMATION TECHNOLOGY   **Shijiazhuang, China**
Quality Assurance Engineer Intern   *May 2019 - Aug 2019*
- Developed automated test scripts with Python and Linux for over 50 features after analyzing system specifications.
- Designed a risk management system which successfully anticipated 4 risks associated with project delays and wrote quality assurance weekly reports to monitor program progress.
- Communicated actively with customers and engineers to ensure our products met all requirements.

EDUCATION

NORTHEASTERN UNIVERSITY, SILICON VALLEY   **San Jose, U.S.**
Master of Science in Computer Science   *Sep 2021 – May 2023*
- GPA: 3.8/4.0
- Key Coursework: Web Development, Algorithms, Programming Design Paradigm, Machine Learning.

UNIVERSITY OF CALIFORNIA, SAN DIEGO   **San Diego, U.S.**
Bachelor of Science in Computer Science   *Sep 2016 - Dec 2019*
- Major GPA: 3.7/4.0
- Key Coursework: Advanced Data Structure, Computer Network, Computer Vision, Database, Computer Architecture.

PROJECTS

Serverless Web Application for Newsgroup Post Recommendations || *AWS, NLP*   *May 2023 - Jul 2023*
- Developed serverless web application using AWS Lambda, API Gateway, DynamoDB, Cognito, and Amplify Console.
- Integrated a machine-learning based semantic personalized recommendation system utilizing Amazon SageMaker's Neural Topic Model and K-Nearest Neighbor algorithms for information retrieval.

Travel Booking Web App || *JavaScript, Full-stack*   *Aug 2022 - Dec 2022*
- Constructed a responsive online booking application using MongoDB, Express, React, Node stack technologies.
- Implemented security measures (e.g., authentication, data encryption) to protect user information and account safety.
- Served as an Agile group leader, effectively overseeing and monitoring project progress to ensure on-time delivery and adherence to requirements using Jira.

Android Social App || *Java, Android Studio*   *Mar 2022 - May 2022*
- Established an online communication system with JSON and Firebase Realtime Database.
- Designed an online PvE air combat game with touching buttons or gyroscope control options.

Ethernet Frames Router || *C++*   *Mar 2019 - Apr 2019*
- Built and tested a router on Linux Mininet to handle and route ICMP messages, ARP requests/replies, and TCP/UDP packets while maintaining an APR cache to effectively communicate through IP addresses.

SKILLS

Languages: Python, Java, JavaScript, HTML, C++, C, SQL, MATLAB.
Frameworks/Tools: Node.js, React, Django, Flask, jQuery, Git, AWS, Linux, Jira, MySQL, Firebase, Docker