Ryan M. Chang

PROFESSIONAL EXPERIENCE

University of Oregon, Center for Applied Second Language Studies (CASLS)   **Eugene, OR**
Information Technology Consultant   *Feb 2020 – Present*

- Full stack PHP, Yii, and mobile app developer on a 1-person technology team.
- Responsible for all aspects of CASLS web and mobile-based language education products, including software development, deployment, maintenance, and troubleshooting.
- Successfully migrated all servers from standalone Linux-based servers to containerized services running on a Kubernetes based platform which reduced maintenance time, improved software development speed, and increased server stability.
- Responsible for systems administration of all web, database, and supporting servers.
- Coordinated with UO central IT to ensure minimal downtime for server maintenance along with implementation of security best practices.
- In collaboration with stakeholders, designed and implemented new software features, provided time estimates for grant proposals and justifications, and recommended products and courses of action to meet identified needs.
- Handled primary product user support and troubleshooting through email and phone, and office IT issues.
- Primary technical point of contact for outside software contractors assisting with Git repository management, environment set up, verifying product functionality, and new feature testing.

University of Oregon, Oregon Career Information System (Oregon CIS)   **Eugene, OR**
Analyst Programmer   *Sep 2016 – Jan 2020*

- Full stack C# ASP.NET developer on a 3-person technology team with limited resources.
- Designed and implemented new features into a large, existing system used by 70% of Oregon school districts.
- Developed and implemented a complete front-end redesign of the entire system in 3 months using the Zurb Foundation framework. Significantly improved the usability of the system on mobile devices, which increased system license renewal rates. Ensured web accessibility standards were implemented and met.
- Performed continuous refactoring and bug fixing of complex legacy system features.
- Created a continuous integration pipeline based on Git and TeamCity which significantly reduced deployment time to development and production servers. Established a process for Git branches and pull requests, saving significant time by eliminating manual code merges.
- Mentored intern on developing Selenium and NUnit automated tests, which were integrated into the CI pipeline.
- Deployed and administered VMware ESXi, Windows, and Linux servers to support operations.
- Responded to office IT issues and system user support cases through email and phone.
- Filled in as SCRUM Master as needed and assisted with the implementation of the SCRUM process.

California Polytechnic State University, "Does Active Learning Build Grit?" NSF Grant   **San Luis Obispo, CA/Remote**
Principal Developer & Engineering Lead (Part time)   *Sep 2014 – Oct 2019*

- Architected and developed an Android app, iOS app, and backend systems to measure time spent in and out of class for 200+ students.
- Led a team to develop major app updates as the study progressed.
- Promoted to Engineering Lead in charge of all technical decisions after computer science co-PI left the university.

California Polytechnic State University, Computer Science & Software Engineering Department **San Luis Obispo, CA**
Operations Specialist (Temporary 3 Month)   *Apr 2016 – Jul 2016*

- Responsible for the administration and operations of one of the most diverse and complex computing environments on campus, consisting of all department Windows, Linux, and macOS servers, along with 300+ Windows, Linux, and macOS workstations, spanning 11 labs and 30+ offices.
- Managed student workers and responded to all IT issues from students, faculty, and staff, including user support.

Collectve   **San Luis Obispo, CA**
Principal Developer & Engineering Lead   *Jun 2015 – Apr 2016*

- Collectve was an online platform targeted at startups where founders could ask about and share answers to frequently asked questions, business strategies, and other tips. Collectve was a startup accepted into the Cal Poly Center for Innovation and Entrepreneurship summer accelerator program designed to launch promising ideas into full-fledged companies. Out of 60+ applications, 12 were accepted.
- Led a team to develop an Android app, a responsive website based on React for iOS/desktop, and a backend based on the Parse Platform. In charge of all technical decisions, planning, delegation, and execution.

EDUCATION

California Polytechnic State University   **San Luis Obispo, CA**
B.S. in Software Engineering   *March 2015*

SKILLS AND INTERESTS

Languages/Frameworks: PHP, Yii, C#, ASP.NET, MS SQL Server, MySQL, HTML, CSS, JS, NodeJS, Android SDK, iOS SDK, Parse Platform.
Technical: Significant experience with Agile software development, the SCRUM process, and supporting tools including JIRA, Git, and continuous integration. Extensive user support experience, and systems administration knowledge including VMware ESXi and vCenter, Docker, Microsoft Windows and Windows Server, Linux, and macOS.
Interests: DevOps, virtualization applications, television technologies, consumer technology, commercial aviation.

PUBLICATIONS

David S. Janzen, **Ryan Chang**, John Chen, **Development of mobile applications to study engineering students' patterns of learning**, *Frontiers in Education 2019*, Cincinnati, OH, October 2019.
John C. Chen, David Janzen, **Ryan Chang**, Karen McGaughey, Jim Widmann, **Mobile Applications to Measure Students' Engagement in Learning**, *ASEE Computers in Education Journal* (In press 2022)