

# MAC BALER

☎ (518) 495-4300

✉ macbaler93@gmail.com

🌐 macbaler.me

🌐 linkedin.com/in/macbaler

With Software Engineering experience spanning full-stack, and fluent, professional proficiency in Japanese, paired with a global mindset & experience working abroad in Japan, I believe I'm a capable, valuable asset to any team. I pride myself on the degree to which I complete tasks. Beyond simply producing results, I constantly & curiously strive to further achieve, finding more efficient, effective ways to solve problems. I'm an eager, rapid learner, on- & off-the-job. Quick to adapt & pickup new skills, honing my flexibility while abroad, my communication ability, diligence, perseverance, & collaborative nature help me succeed. Furthermore, I take pride in being reliable – not only timely, but taking utmost care to ensure high quality in my work. Ultimately, the onus is upon us as engineers to shape our world for the better – a duty I yearn to fulfill.

## EDUCATION, HONORS, CERTIFICATIONS

**Colgate University**, Bachelor of Arts (B.A.), Hamilton, NY

May 2015

- Double Major – Computer Science (Honors), Japanese (High Honors)
- Summa Cum Laude; GPA – 3.94/4.00; Class Rank 14/732
- Japanese High Honors Thesis & Research - "If We Lend an Ear to Youth Language: A Translation of 「若者言葉に耳をすませば」"
- Phi Beta Kappa (ΦBK) Honor Society, Upsilon Pi Epsilon (ΥΠΕ) Computer Science Honor Society

**Kansai Gaidai University** (関西外国語大学), Asian Studies Program, Osaka, JAPAN

August – December 2013

- Studied abroad, Fall semester. Lived with a Japanese host-family. Received merit scholarship for academic excellence.

**JLPT - Japanese Language Proficiency Test** – N2, Passed [Business Level]

January 2016

## WORK EXPERIENCE

**Software & Web Engineer** – Weblio, Kyoto, JAPAN

October 2016 – May 2018

- Core member of engineering team; worked w/ design & business teams to create an online English-conversation lesson service (for native Japanese), w/ lesson reservation and an in-browser lesson classroom, where users have 1-on-1 sessions w/ native speakers.
- Constructed an online lesson page feat. video/voice/text chat, live notifications, Eng-Jpn dictionary, and synced student-teacher real-time textbook interface. Currently utilized in hundreds of schools & classrooms across Japan. Built w/ React.js/Redux/WebRTC (ES6+).
- Created proprietary client-side system to auto-detect lesson attendance & user incoming/outgoing A/V issues in WebRTC streams. Results displayed live via admin dashboards & user notifications, allowing for instant error-reporting & proactive troubleshooting. Led to massive decrease in support queries and faster issue resolution. Utilized MediaStream/WebAudio API & Firebase Realtime DB.
- Spearheaded creation of live lesson recording feature via Socket.io & Node.js, solving client-requested post-lesson playback.
- Profiled React code performance; refactored w/ pure components. Cut page-load/TTI in half; eliminated ~80% of unnecessary page renders; greatly decreased client-side JS load, allowing for smooth experience on old/low-end machines, catering to user-base.
- Worked w/ team to redesign and migrate old Perl back-end to Node.js w/ Express, custom ORM, routing middleware, models, etc. Reworked ~30 page front-end (Pug/SASS), bundling w/ Webpack. Decreased loading times by ~60%; raised server up-time & stability.
- Introduced Vue.js to the team, creating various SPAs which greatly reduced manual data-entry times on business & admin ends.
- Implemented CI Workflow (via Jenkins) running in Docker container, automating build, lint, testing, deployment, etc.
- Integrated unit testing into team workflow, adding hooks & CI Git integration.
- Performed and underwent thorough code reviews for all PRs.

**Assistant Language Teacher** – JET Program - Komatsu Meihou Senior High School, Ishikawa, JAPAN

July 2015 – July 2016

- Successfully created & executed lesson plans, teaching English to 500+ students of various levels, collaborating w/ foreign English teachers, communicating solely in Japanese. Used adaptability, flexibility, and global mindset to thrive in the Japanese workplace.
- Ran cultural seminar, graded students' work, created exams & rubrics, supervised English Club, and tutored students 1-on-1.

**Senior Admission Fellow** – Office of Admission, Colgate University

August 2014 – May 2015

- Interviewed prospective students. Managed student panels, class visits, and event registration.
- Revised panel & tour manuals. Led campus tours and presented panels to groups of 200+.

## SKILLS

JavaScript / ES6+ (Promises, async/await, Moment.js, jQuery, AJAX, ES Modules, etc.) HTML, Pug, CSS, SASS, etc. Git, GitHub REST API

Node.js, Express, npm React.js, Redux Vue.js Webpack Babel SQL WebRTC, PeerJS Firebase Realtime DB Docker Jenkins

Linux Unit Testing (Jest, Enzyme, Jasmine, etc.) bit of NGINX, bash Gulp, ESLint, ESDoc, hooks, etc. Java Presentation

bit of Python, Django, C/C++, Perl, Ruby, AngularJS MS Word, PowerPoint, Excel Adobe Photoshop, Premiere

## HOBBIES

D&D, tabletop games, music, collecting records, concerts, guitar, astronomy, theatre/acting, video games, filmmaking, movies/tv