

# Jeremy Sun

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Versatile software engineer with a passion for automation. Adept at troubleshooting containerized microservices in HA environments. Experienced with **web development**, **CI/CD**, **IaC**, **orchestration** and **configuration management**.

## Technical Skills

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- **Languages:** Python, Bash, JavaScript, TypeScript, C#, C++, Java, Groovy, PHP, SQL, Powershell, HTML, CSS
- **Infrastructure:** Docker, Linux, AWS, Azure, Kubernetes, PostgreSQL, MongoDB, NGINX, HAProxy, RabbitMQ
- **Tools:** Ansible, Jenkins, Terraform, Git, Jira, Packer, Vault, JFrog, Selenium, Postman, Prometheus, Gradle
- **Frameworks:** Node.js, React, Vue.js, .NET, Laravel, Spring, jQuery, Express, Mocha, Bootstrap

## Work Experience

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### DevOps Software Developer | Imagine Communications | Waterloo, ON

JANUARY – APRIL 2022

- Developed a **Jenkins continuous delivery pipeline** with **Groovy** scripts to provision infrastructure, deploy microservices and automate tests, saving **8+** hours of manual configuration when validating new builds.
- Automated **TLS** certificate management for **Route 53** DNS, **.NET** apps and **HAProxy** using **Certbot** and **LetsEncrypt**.
- Led infrastructure team to resolve SSL protocol errors, ensuring on-time delivery of ABC-OTV playout systems.
- Prototyped **Packer** and **Python** scripts to export cross-platform Ubuntu images for **AWS** and **VMWare** hypervisors, automating the migration of on-premises virtual machines to compatible **HVM AMIs** in the cloud.
- Standardized **Linux** virtual machine deployment through **Infrastructure as Code**, using **Terraform** and **cloud-init**.
- Created **Ansible** scripts to serve network shares across replicated **NGINX** containers in **Docker Swarm** clusters.

### Software Test Engineer | Homecare Hub | Toronto, ON

MAY – AUGUST 2021

- Initiated, designed and developed an extensible, **Node.js** web crawler proven to successfully audit web domains, upload generated test reports to an **S3 Bucket** and catch software defects.
- Identified and eliminated bottlenecks in the application deployment pipeline, improving build speed by **75%**.
- Configured and deployed a containerized **VNC Server** on **EC2** to enable remote debugging of **Selenium** scripts.
- Implemented dynamic email templates using **Laravel Blade** and **PHP**, cutting over **6000** lines of redundant HTML.
- Developed a tool for patients to request a quote and generate a PDF using a **Vue.js**, **Laravel** and **MariaDB** stack.

### Web Application Engineer | Ontario Institute for Cancer Research | Toronto, ON

MAY – AUGUST 2020

- Discovered and resolved security vulnerabilities in the file upload system of PHI sensitive, **MERN** web apps.
- Identified **90+** API/UI defects by analyzing source code, data in **MongoDB** and server logs in **Docker** containers.
- Automated regression test suites using **Postman** API and **Bash** scripts, reducing functional testing duration by **70%**.
- Revamped the theming of responsive web pages and web forms using **HTML**, **Bootstrap**, **CSS**, and **Liquid**.

## Software Projects

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### Story++ | Hack the North 2020++ | [devpost.com/software/story-levhaz](https://devpost.com/software/story-levhaz)

JANUARY 2021

- Implemented a dynamic, responsive frontend with **React** and Material-UI to navigate through interactive stories.
- Designed a NoSQL data schema for **Firestore** database to represent an interactive story as a directed graph.
- Developed **RESTful** API endpoints in **Express**, served on **Google Cloud App Engine**.

### JavaScript Application Suite | [jeremysun.me/projects](http://jeremysun.me/projects)

JULY – DECEMBER 2020

- Developed a responsive, customizable timer with **Bootstrap**, **CSS**, and **jQuery** to celebrate the upcoming Friday.
- Implemented an interactive, responsive chessboard with **HTML** canvas, ES6 classes, and custom SVG assets.
- Aggregated projects on a **React** web app with a dynamic and intuitive user interface, hosted with **Firebase**.

## Education and Certifications

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University of Waterloo | Candidate for Bachelor of Computer Science | **3.97 GPA**

2019 – PRESENT

Java SE 8 Programmer I Certification | Oracle

JANUARY 2020