

# Emma Cline

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## EDUCATION

<b>University of Washington Seattle</b> <i>Bachelor of Science in Informatics, Minor in Mathematics, 3.87 GPA</i>	Seattle, WA 2011 – 2014
<b>DigiPen Institute of Technology</b> <i>Towards overall degree at University of Washington, 4.00 GPA</i>	Redmond, WA 2009 – 2011
<b>Bellevue College</b> <i>Towards overall degree at University of Washington, 4.00 GPA</i>	Bellevue, WA 2008 – 2011

## EXPERIENCE

<b>Freelance Software Engineer</b> <i>Self-Employed</i>	Aug. 2020 – Present Remote
<ul style="list-style-type: none"><li>TypeScript Discord bots configured by JSON to manage large servers with an emphasis high performance.</li><li>Providing proof of concept code for several University of Washington research projects.</li><li>Computer Science tutoring for university students.</li><li>Teaching workshops on modern web development.</li></ul>	
<b>Lead Senior Software Engineer</b> <i>Humble Bundle</i>	Jul. 2018 – Jul. 2020 Remote
<ul style="list-style-type: none"><li>Promoted from Senior Software Engineer to Lead Senior Software Engineer II over the course of my employment.</li><li>Led the platform team focused on site reliability engineering.</li><li>Worked with product to define a plan to optimize the user funnel for the primary product Humble Monthly.</li><li>Led the internationalization project for an 8-year-old application with minimal prior internationalization efforts.</li><li>Integrated an OAuth login system for Facebook and Google into the existing user system.</li><li>Executed a project to migrate all sessions to the newly required email or TOTP two-factor system.</li><li>Helped define standards for representing dates, times, money, and percents in Python and JavaScript.</li></ul>	
<b>Lead Full Stack Software Engineer</b> <i>Committee for Children</i>	Jan. 2018 – Aug. 2018 Seattle, WA
<ul style="list-style-type: none"><li>Led the replacement of a legacy, monolithic DNN platform to a high performance platform utilizing using React and .NET Core.</li><li>Migrated user authentication to the IdentityServer4 OpenID identity provider.</li><li>Incrementally transformed a series of untested stored procedures into a modern C# WebAPI.</li></ul>	
<b>Full Stack Software Engineer</b> <i>Trov</i>	Jul. 2013 – Dec. 2017 Remote
<ul style="list-style-type: none"><li>Remote software development team where developers wrote unit and integration tests.</li><li>Constructed an on-demand insurance platform for consumer items with C# and SQL.</li><li>Developed an app for managing claims and insuring items with React and Angular.js.</li><li>Built a business intelligence system for sending information to Trov's partners using Python.</li></ul>	
<b>Application Researcher</b> <i>University of Washington</i>	Jan. 2013 – Nov. 2013 Seattle, WA
<ul style="list-style-type: none"><li>Lead developer for the TypeScript library that abstracted cloud storage services like Dropbox, Google Drive, and AWS.</li><li>Contributed to a research paper on abstracting cloud storage.</li></ul>	
<b>Software Engineer Intern</b> <i>E*Trade</i>	Sept. 2012 – May 2013 Seattle, WA
<ul style="list-style-type: none"><li>Worked on an international team to develop high performance stock trading apps implemented in Java</li><li>Developed high-frequency trading features that supported options (contracts to buy a stock at a given price in a span of time).</li></ul>	

## Web Instructor and Engineer

Jan. 2012 – Jun. 2013

University of Washington

Seattle, WA

- Taught modern web development standards to University of Washington staff and students.
- Developed applications to manage courses and support tickets using Python and Django.

## Software Engineer Intern

Apr. 2012 – Nov. 2012

Rakuten

Seattle, WA

- Scraped and normalized product information using Python.
- Worked with Overstock, Amazon, and Walmart APIs to gather product information and update listings.

## Software Engineer Intern

Apr. 2011 – Nov. 2011

SmiteWorks

Bellevue, WA

- Worked on the FantasyGrounds chat feature using C.
- Led the development of a C app to import character data from competitors apps.
- Worked with the Steam gaming app store to publish updates and respond to customer feedback.

## PROJECTS

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### Personal Website | *TypeScript, Next.JS, TailwindCSS, Docker, Node.js, MDX, React*

- Next.JS powered blog and resume website adhering to modern web development standards.
- High performance and no JavaScript support is enabled due to a hybrid model of server-side and client-side rendering.
- Blog using MDX files for easy maintenance and richly formatted posts.

### Note Doctor | *TypeScript, Node.JS, SendGrid, Google Cloud, eslint, prettier*

- A CLI tool for triaging markdown files using front-matter headers sorted by priority, status, category, and due date.
- Sends a daily email digest of due and urgent tasks using the SendGrid Email API and Google Cloud VMs.

### Discord Management Bot | *TypeScript, Node.JS, Docker, Discord.js, eslint, prettier*

- Discord bots written in TypeScript running on Node.JS for logging, music, GPT-2 chatting, role management, and security monitoring.
- Scales to a discord of any size and can be configured with JSON to support any number of discords.
- Bots are broken up into functions respecting separate concerns to enable granular permissions for each bot.
- Code is broken up into highly reusable modules that can be pulled into any TypeScript project for customization.

### GPT-2 API | *Python, Starlette, GPT-2, Tensorflow, Docker, Kubernetes*

- An API that allows requests against GPT-2 models to generate meaningful responses to any text prompt.

### dstruct | *TypeScript, Grunt, Docker, Bower, Karma*

- Common data structures and algorithms for TypeScript.
- Based on Java collections, C# collections, and Google Java collections.

### ShareTube | *TypeScript, Node.JS, Docker, React, eslint, prettier*

- Displays a video with multiple sources allowing the user to select which source is used.
- Implements a single shared comments thread across all sources for the video.

### Autocomplete Comparison | *TypeScript, React, Redux, React Native, C#, Blazor*

- An implementation of the same search autocomplete similar to Google in React Native, React, and C# Blazor.

### FlightSearcher | *C#, ASP.NET MVC, TypeScript, React, Redux, Webpack*

- An application to search for flights based on airports and datetimes.

## TECHNICAL SKILLS

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**Languages:** Bash, C, C#, CSS, HTML, JavaScript, Python, SQL, TypeScript

**Frameworks:** ASP.NET MVC, Flask, Next.JS, React, Starlette, Vue.js

**Libraries:** ASP.NET MVC, NumPy, pandas, PostCSS, TailwindCSS, TensorFlow

**Databases:** Elasticsearch, MSSQL, MySQL, PostgreSQL

**Cloud Providers:** Akamai, AWS, Cloudflare, DigitalOcean, Google Cloud, Microsoft Azure, Vercel

**Developer Tools:** cmake, Docker, ESLint, gcc, Git, Kubernetes, npm, Prettier, Visual Studio, VSCode, webpack, yarn

**Operating Systems:** ChromeOS, GNU/Linux, MacOS, Windows

**Office Software:** Apple iWork, Google Docs, LaTeX, LibreOffice, Microsoft Office

**Soft Skills:** Constructive feedback, Desire to listen and grow, Effective concise communication, problem solving with minimal guidance