# **Emma Cline**

# +1-669-666-4508 | emma@cline.engineer

# emma.cline.engineer | linkedin.com/in/EmmaJCline | gitlab.com/EmmaJCline

#### **EDUCATION**

University of Washington Seattle

Bachelor of Science in Informatics, Minor in Mathematics, 3.87 GPA

DigiPen Institute of Technology

Redmond, WA

Towards overall degree at University of Washington, 4.00 GPA

Bellevue College

Towards overall degree at University of Washington, 4.00 GPA

2008 – 2011

#### **EXPERIENCE**

Self-Employed

# Freelance Software Engineer

Aug. 2020 - Present

Remote

- TypeScript Discord bots configured by JSON to manage large servers with an emphasis high performance.
- Providing proof of concept code for several University of Washington research projects.
- Computer Science tutoring for university students.
- Teaching workshops on modern web development.

# **Lead Senior Software Engineer**

Jul. 2018 - Jul. 2020

<u>Humble Bundle</u> Remote

- Promoted from Senior Software Engineer to Lead Senior Software Engineer II over the course of my employment.
- Led the platform team focused on site reliability engineering.
- Worked with product to define a plan to optimize the user funnel for the primary product Humble Monthly.
- Led the internationalization project for an 8-year-old application with minimal prior internationalization efforts.
- Integrated an OAuth login system for Facebook and Google into the existing user system.
- Executed a project to migrate all sessions to the newly required email or TOTP two-factor system.
- · Helped define standards for representing dates, times, money, and percents in Python and JavaScript.

## **Lead Full Stack Software Engineer**

Jan. 2018 – Aug. 2018

Committee for Children

Seattle, WA

- Led the replacement of a legacy, monolithic DNN platform to a high performance platform utilizing using React and .NET Core.
- Migrated user authentication to the IdentityServer4 OpenID identity provider.
- · Incrementally transformed a series of untested stored procedures into a modern C# WebAPI.

#### **Full Stack Software Engineer**

Jul. 2013 – Dec. 2017

<u>Trov</u>

Remote

- Remote software development team where developers wrote unit and integration tests.
- Constructed an on-demand insurance platform for consumer items with C# and SQL.
- Developed an app for managing claims and insuring items with React and Angular.js.
- Built a business intelligence system for sending information to Trov's partners using Python.

## **Application Researcher**

Jan. 2013 – Nov. 2013

University of Washington

Seattle, WA

- Lead developer for the TypeScript library that abstracted cloud storage services like Dropbox, Google Drive, and AWS.
- Contributed to a research paper on abstracting cloud storage.

# Software Engineer Intern

Sept. 2012 – May 2013

<u>E\*Trade</u> Seattle, WA

- Worked on an international team to develop high performance stock trading apps implemented in Java
- Developed high-frequency trading features that supported options (contracts to buy a stock at a given price in a span of time).

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

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

Bellevue, WA

<u>SmiteWorks</u>
• 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**

Rakuten

## 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 of 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

 $\textbf{Languages} \hbox{:} \ Bash, C, C\#, CSS, HTML, JavaScript, Python, SQL, TypeScript$ 

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, DigtalOcean, 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

**Professional Affiliations**: IEEE Computer Society, IEEE Robotics and Automation Society, IEEE Communications, Association for Computing Machinery

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