


# Damon Turcotte

## Web Developer

Proficient in front and back end development of web applications and software, database design and management, deployment to cloud-based infrastructure, and implementing microservices and service-oriented architectures for enhanced scalability. Strong problem-solving ability, detail-oriented, and committed to continuous learning and growth as a developer.

 <https://turcotte.tech>

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 Lethbridge, Alberta

### SKILLS

#### Front End

 React  
 JavaScript  
 jQuery  
 HTML  
 CSS  
 SCSS

#### Back End

 Python  
 Django  
 PostgreSQL  
 OAuth 2.0  
 OpenID

#### Operations

 Linux  
 Bash  
 NGINX  
 Gunicorn  
 GitHub  
 DNS

### CERTIFICATES

**Django and Python**  
Masterclass  
Udemy  
Oct 2022 - Jan 2023

**Web Development**  
Bootcamp  
Udemy  
Jul 2022 - Oct 2022

**Python for**  
Everybody  
Coursera, University  
of Michigan  
Apr 2022 - Jul 2022

### PROJECTS

**Name:** Echo Social Network

**Function:** Social Media Platform & Single Sign-on Provider

**URI:** <https://echonetwork.app>

- Designed dynamic user interface with hybrid rendering using server-side templating and client-side scripting.
- Developed a content feed with infinite scrolling to display posts, replies, reposts of user content, and shared news articles, with a content ordering algorithm based upon user engagement and time of creation.
- Built a private messaging application with chat instances accessible through a list of the user's ongoing chats.
- Created a content browsing application as a daily news portal with user and content search functionality.
- Designed detailed user profile templates with user-specific content feeds displaying their posts, replies and likes.
- Integrated a notification system into each on-site application to send alerts to the target users of user interactions.
- Created front end image cropping tools with back end logic for automated resizing, reformatting and removal.
- Added OpenID Connect identity provider functionality with HS256 encryption and custom user data claims.

**PYTHON** **DJANGO** **DJANGO TEMPLATE LANGUAGE** **JQUERY** **JAVASCRIPT** **POSTGRESQL** **OAUT** **OIDC** **GNEWS API**

**Name:** Chronicle

**Function:** Personal Site & Content Management Interface

**URI:** <https://turcotte.tech>

- Designed adaptive interface that adjusts features based on viewport, user status, permissions & content metadata.
- Developed React views to dynamically generate a dashboard, project pages, blog content and related multimedia.
- Wrote extensive API integration module to generate requests and process responses from Chronicle's API services.
- Built intuitive content management tools into the user interface to create and edit project info and blog content.
- Created an admin-only inbox with unread mail notifications to access user messages from within Chronicle.
- Implemented client-side routing with resource preloading and asynchronous data fetching to optimize navigation.

**REACT** **JAVASCRIPT** **SCSS** **OAUT** **HTML** **GITHUB API** **CHRONICLE API**

**Name:** Chronicle API

**Function:** RESTful Content Delivery Application

**URI:** <https://api.turcotte.tech>

- Constructed dynamic relational serializers to manage and transform complex data structures for several models.
- Engineered comprehensive data models for managing blog posts, project data and their associated multimedia, including modified write methods with conditional triggers for media manipulation and cascading table updates.
- Implemented custom OAuth 2.0 authentication flow to handle OpenID Connect and token introspection protocols, proof of code exchange, token handling and storage, and user account generation and synchronization.
- Created a custom API testing interface to generate HTTP requests and recursively construct visualized data.
- Integrated Twilio's SendGrid API to generate and send messages from users to my business e-mail account.

**PYTHON** **DJANGO** **DJANGO REST FRAMEWORK** **OAUT** **OIDC** **POSTGRESQL** **JAVASCRIPT** **SENDGRID API**

**Name:** Echo Node

**Function:** Dedicated Web Server & Infrastructure

- Setup PostgreSQL databases for application servers and configured for remote management with PGAdmin4.
- Established DNS records and SSL certificates for secure access to applications via registered domain names.
- Configured NGINX and Gunicorn to serve multiple web applications securely from isolated virtual environments.
- Implemented CI/CD pipelines with YAML, Bash and GitHub Actions' deployment, testing and environment tools.
- Performed manual server migrations when changing providers between Digital Ocean, Linode and Google Cloud.

**UBUNTU** **NGINX** **GUNICORN** **BASH** **YAML** **GITHUB ACTIONS** **POSTGRESQL** **OPENS** **UFW** **DNS**