



EDUCATION

University of Manitoba

2017 - 2023

- BSc. Major in **Computer Science**

SKILLS

Enterprise Delivery	Agile (SAFe), Waterfall, CI/CD, TDD, SDLC
Cloud / Web3 Interop	AWS, MS Azure, IBM Cloud, IPFS, Blockchain
Programming	Node.js, Python, Java, ASP.NET, PHP
Data Vis / Analytics	MS PowerBI, Access, Matplotlib, Pandas
Site Development	Confluence, SharePoint, Wordpress
Mobile Development	React Native, Android Studio
Technical Utility	Jira, Git, Markdown, OpenAPI, Linux, Docker
UI / UX / Accessibility	Figma, Lighthouse, WCAG, WAI-ARIA
Web Frameworks	React, Angular, Vue, Svelte, Lit, Solid, Blazor

VOLUNTEERING



Received the **Emerging Leader 2022 Award** from the University of Manitoba from the distinguished leadership of 2 organizations



Facilitated competitions for IEEEExtreme, Google Competitions, Hackathons, ICPC, and the G/M Jam



Led technical workshops on web development with React, Vue and Svelte, UI design, P2P development, programming competitions, and game art

Extracurricular Activities

- UM Competitive Programming VP. Jun 2022 - April 2023
- Bisons' Programming Team Chair . Sep 2021 - Dec 2022
- Asper MISA Co-President . . . . Sep 2021 - Apr 2022
- MIS/CS Help Centre Lead . . . . Oct 2021 - Apr 2022
- .devClub Promotions Executive . . May 2021 - Apr 2022
- WICS Peer Mentor . . . . . Jan 2022 - Apr 2022
- CUSEC Promotions . . . . . Sep 2020 - Jan 2022

WORK EXPERIENCE

Business Systems Analyst

May - August 2022

TD (Toronto-Dominion) Bank

- Developed an Onboarding roadmap for **Confluence** through an iterative process of compiling data, proposing design, reviewing implementation, and producing user and technical documentation with DaaS Agile leads
- Gathered product owner requirements, tracked epics, stories, and success criteria with **Jira**, and released iterable products using **Agile** methodology

Full-Stack LMS Developer

April - Sept 2021

Delphi Technology Corp

- Orchestrated a dynamic course roadmap, with focus on architecture design, data bundling with **PHP/AJAX**, and **ES6** class implementations
- Enhanced JavaScript and **AWS Lex** chatbot with speech and pattern recognition for interactive aviation English practice modules and tests
- Prototyped a suite of landing dashboards with **Figma**, reducing new user time to locate class resources by 70%

PROJECTS

WebLC3:

Assembler and Simulator

Role: Architecture | UI/UX | Frontend

- SvelteKit
- Typescript
- Caddy
- Express
- Assembly
- YAML

Built 15+ dynamic **Svelte** components with state management, documentation pages, and full keyboard and **WCAG/WAI-ARIA** accessibility

Visit at [lc3.cs.umanitoba.ca](https://lc3.cs.umanitoba.ca) (desktop recommended)

2 os  
LC-3 and ARM

150+  
users  
per academic term

LC3

36x  
faster  
than LC3Tools

StudyBuddy:

Academic Companion

Role: Project Lead | UI/UX | Frontend | Tester

- Vue
- Javascript
- Jest
- Flask
- Cypress
- SQL
- Github Actions
- Docker

Led solutions architecture and development of study suite with **CI/CD** and automated acceptance, integration and unit testing

Visit at [github.com/andreaabellera/StudyBuddy](https://github.com/andreaabellera/StudyBuddy)

5  
test layers  
unit, integration,  
acceptance, load,  
security

55 RPS for  
100 users



7 CI/CD  
workflows  
regression tests,  
Docker compose,  
security scanning