

# Denis Pechenkin

(587) 968-7526 | Calgary, AB

dpech0511@gmail.com | [LinkedIn](#) | [Github](#) | [NPM](#)

Aspiring software developer with experience in creating modern, user-friendly, and responsive web and desktop applications. I am passionate about building impactful software that enhances user experiences and drives meaningful outcomes.

## Skills

---

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

**Frameworks:** React, Express.js, .NET Core, Spring Boot, Next.js, React Native

**Cloud:** Google Cloud Platform, Firebase

**Databases:** PostgreSQL, Oracle SQL, Firestore

**Tools:** GraphQL, Drizzle, Node.js, Docker, Redux, Vite, Jest

**Miscellaneous:** REST API, OOP, Design Patterns, Data Structures, Algorithms, JWT, SAML, OAuth

## Experience

---

### Full Stack Developer

**September 2024 - present**

Southern Alberta Institute of Technology (Capstone project)

Calgary, Alberta, Canada

Project for Uvaro (online educational platform, Uvaro.com)

- Developing a full-stack solution for an EdTech company using modern in-demand technologies such as TypeScript, React, PostgreSQL, Node.js, GraphQL, Drizzle, and Google Cloud.
- Developing a GraphQL API using Apollo Server as a middleware for Express.js. By designing flexible schemas, I eliminated over-fetching and under-fetching, reducing the average number of requests per action by 3 and enhancing client-side efficiency.
- Utilizing Docker to optimize the development environment by containerizing a PostgreSQL database and automating setup and data load process. This has reduced the probability of environment-related errors by 95%.
- Securing the API by implementing SAML authentication, token encryption, and input validation, effectively mitigating vulnerabilities such as XSS, SQL injection, and spoofing attacks.
- Ensuring code maintainability and scalability by applying software architecture principles and design patterns, including separation of concerns, loose coupling, and MVC. These practices enhance the flexibility of the codebase and help to implement new features or change the existing ones easier.

### Volunteer Frontend Developer

**February 2024 – July 2024**

Empowered Futures, Canadian non-profit organization

Calgary, Alberta, Canada

- Contributed to frontend development by building reusable components, refactoring legacy code, and conducting thorough pull request reviews to ensure code quality.
- Developed a user-oriented web frontend using React and collaborated with the UI team to transform UI prototypes into production-ready TypeScript components.
- Gained experience working in an organization with multiple teams, tracking progress with agile methodologies, and developing containerized applications.

### Part-time Inventory Clerk

**April 2024 – Present**

Canadian Tire Corporation

Calgary, Alberta, Canada

- Receiving and stocking over 500 items per shift.
- Operating an inventory management device and processing paperwork to ensure inventory consistency.
- Supporting team members to enable an effective workflow and assisting new hires to facilitate a seamless onboarding experience.

Achievements

YYC Hacks 2024 – Winner

February 2024

- Won the largest hackathon in Calgary by building YYC Scan, a full-stack mobile application. Worked in a fast-paced environment with a team of 9 people.
- Designed an intuitive user interface, ensuring a smooth and user-friendly experience for end-users.
- Collaborated with the frontend team to translate design prototypes into production-ready frontend code.
- Gained hands-on experience in full-stack development by learning how different architectural components communicate with each other and integrate into the system.

SAITHack 2023 – Winner

December 2023

- Won a college hackathon with a six-person team by developing an application for SAIT students with a real-time chat and AI integration.
- Utilized Firebase to implement authentication and integrate a cloud storage for large objects and a database.
- Gained experience working under pressure and learned the importance of open communication and collaboration within a team to achieve a healthy and productive team environment.

Personal Projects

Centauri – web-based multi-oscillator polyphonic synthesizer. [Github](#)

- Developed a web synthesizer using React, Redux, and Tone.js, implementing subtractive synthesis principles to enable real-time sound generation.
- Designed an intuitive interface for controlling oscillator, envelope, and LFO parameters in real time, using popular VST synthesizers such as Vital and Serum as examples.
- Used Redux as a global state to keep parts of the system interconnected and reduce prop drilling by 90%.

Keyboard MIDI Controller – MIDI device emulator. [Github](#) | [NPM](#)

- Developed an NPM package that emulates the behaviour of a MIDI keyboard and allows to use a common computer keyboard as a MIDI input device.
- Ensured compatibility with any environment by including declaration files in the final build to provide TypeScript support.
- Developed detailed documentation, making the integration of the package easy for every developer.

Coda – Music album recommendations generator. [Deployed application](#) | [Github](#)

- Developed a full-stack application that generates album recommendations with a custom multi-layer random algorithm using Next.js, Node.js, Express, and Spotify Web API.
- Ensured safety of the Spotify access token by using complex encryption and secure cookies.
- Created a configurable option to generate multiple albums with one API request, reducing the number of requests by 5 times.

Education

Software Development Diploma

Southern Alberta Institute of Technology  
Current GPA: 3.87

Graduation Date: April 2025

Calgary, Alberta, Canada

Professional Development

- Modern JavaScript from The Beginning 2.0 (2024) November 2024
- React – The Complete Guide 2024 (incl. Next.js, Redux) April 2024