

Peter Ke

COMPUTER SCIENCE SPECIALIST, UNIVERSITY OF TORONTO

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Education

University of Toronto

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Toronto, ON

2019 — 2023 (Expected)

- Studying Computer Science Specialist and Statistics Minor.
- Cumulative GPA: 3.96/4.00 — awarded Dean's List Scholar.

Skills

Languages Python, Swift, Java, Rust, Dart, HTML/CSS/JavaScript, TypeScript.

Tools & Frameworks Flutter, Node.js, React, Vue.js, Express, Git, Bash, Linux.

Experience

Goopter Holdings Ltd.

Burnaby, BC

iOS DEVELOPER INTERN

August 2018 – August 2019

- Responsible for developing and maintaining the company's multiple iOS apps, written in Swift.
- Implemented networking layers to communicate with REST APIs, designed algorithms for business logic, and built responsive and intuitive user interfaces to display various data.
- Built and documented a cross-platform module using with React Native that can render sale reports and export them to PDF or PNG. The module is used in both the company's iOS and Android apps.
- Decreased the number of bugs and crashes significantly by working with the QA team.

Projects

Dove Programming Language

RUST, WEBASSEMBLY

github.com/dove-lang/dove

- Built a dynamically-typed, object-oriented programming language from scratch with a partner.
- Supports basic data types, variables, branching, looping, functions, classes, inheritance, basic IO, and importing files.
- Implemented a recursive descent parser and a tree-walk interpreter. A bytecode compiler/VM is in progress.
- Can be compiled to WebAssembly to achieve native-speed code execution in web browsers. An online playground is available to run simple scripts.

Connect 5 Game

FLUTTER, DART, NODE.JS, TYPESCRIPT, EXPRESS, SOCKET.IO

github.com/PeterKeDer/connect-5-flutter

- A two-player, turn-based board game on a square grid. The first player to connect 5 pieces in a line wins.
- Cross-platform (iOS/Android) mobile app, written in Dart using Flutter.
- Designed a minmax algorithm which plays the game at a decent level and beats most real players.
- Built a server using TypeScript and Express for online multiplayer, deployed on Heroku. Real-time communication between server and client is implemented using Socket.io.

Course Manager CLI

PYTHON, CLICK

github.com/PeterKeDer/course-manager

- A command-line application to manage university course files, written in Python using the Click library.
- Allows the user to create projects and to-do items for different courses, quickly view or open projects, set deadlines for a project, and see the formatted schedule.
- All commands and functions are fully documented with docstring.

EdiFinance iOS App

SWIFT, UIKIT

- An iOS finance app written in Swift to view stocks, news, and currency exchange.
- Fetches and displays data from public REST APIs. Users can subscribe to a stock to see graphs of stock prices, technical indicators, and latest news articles from selective sources.