

# Lev Karatun

## Full-stack JavaScript developer

6 years of programming experience: professional development of a React + node.js application, teaching university students, and writing C++ as part of my PhD research. I'm passionate about modern technologies, website performance, and writing clean code.

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## WORK EXPERIENCE

### Full-stack software engineer

#### Bibliocommons Inc.

01/2019 – Present

Toronto, Canada

Building online library systems

Achievements/Tasks

- Develop front-end and back-end of a library catalog application (BiblioCore) using React (server- and client-side rendered), Redux, node.js, and Immutable.js.
- Created an npm package to standardize automated code linting rules for use across different teams, incorporated it in the CI/CD pipeline.
- Reorganized development environment which resulted in reduction of setup time from 30 to 10 minutes.
- Made multiple improvements to the application build chain: added webpack plugins to reduce the app bundle size, to enable use of latest JavaScript features and syntax.

### Junior IT systems engineer

#### CROC Inc.

10/2012 – 08/2013

Moscow, Russia

Achievements/Tasks

- Administered Linux servers, prepared technical and operational software documentation.
- Installed, configured and supported IBM middleware applications (IBM DB2, WebSphere App Server, MQ).

### Application Support Specialist

#### JSC "Raiffeisenbank"

06/2010 – 09/2012

Moscow, Russia

Achievements/Tasks

- Provided application support and analytics using SQL and Unix administration skills.
- Collaborated with QA and developers in registering and tracking bugs in the software.

## PROGRAMMING PROJECTS

### Movie data visualization (04/2018 – 10/2018) [🔗](#)

- A dashboard visualizing movie data using D3 on the front end and MongoDB + Express running on node.js on the back end.
- Data is presented using three types of diagrams (scatter plot, map, bar chart) that allow for filtering and user interactions.
- [https://github.com/lkaratun/visualization\\_dashboard](https://github.com/lkaratun/visualization_dashboard)

### Memory game (05/2018) [🔗](#)

- A memory card game powered by React
- [https://github.com/lkaratun/memory\\_game](https://github.com/lkaratun/memory_game)

## SKILLS

JavaScript

React

Redux

node.js

Git

Webpack

SQL

Python

Testing

bash

## TEACHING EXPERIENCE

### Programming on the web (JavaScript)

#### University of Toronto (Department of Computer Science)

09/2018 – Present

Toronto, Canada

Tasks/Achievements

- Teach JavaScript concepts, HTML and CSS responsive layouts, node.js, React and Bootstrap to students in tutorials.
- Decreased time spent on marking students' assignments by 80% by creating a suite of unit tests and integration tests using Jest, jsdom, and Cypress.

### Introduction to programming (Python)

#### University of Toronto (Department of Computer Science)

01/2014 – Present

Toronto, Canada

Tasks/Achievements

- Presented data structures and algorithms concepts to students in tutorials using Python.
- Taught students debugging principles in practicals.

## EDUCATION

### PhD candidate

#### University of Toronto

09/2013 – Present

Toronto, Canada

Thesis

- Numerical modelling of plate tectonics (C++)
- Contributed 8 pull requests to an open-source fluid dynamics modelling software (ASPECT)

### B.Sc. and M.Sc. degrees

#### Moscow State University

09/2004 – 06/2010

Moscow, Russia

Specialization

- Computer technologies in geology

## AWARDS

### Laurence Curtis Teaching Assistance Award (2016)

University of Toronto

- Awarded annually to the most outstanding Teaching Assistants in the Department of Earth Sciences.