



*Your Local Employment Planning Council*

# Occupation Report

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## **Computer programmers and interactive media developers NOC 2174**

**Ottawa, Ontario, & Canada (2016-2021)**

3-year historical data & forecasted growth

*Updated June 2019*

## Computer programmers and interactive media developers

## Ottawa Outlook

NOC 2174

Limited ★ Fair ★★ Good ★★★

Based on past and forecasted growth.

### A Local Snapshot

- Employment in this occupation **increased in Ottawa from 2016 to 2018 (3.4%)**; it is forecast to **increase an additional 2.6%** over the next three years.
- **3.3% were unemployed in Ottawa in 2016**; **1,153 (8.6%)** of those in this occupation were **self-employed**.
- **Median hourly wage** for this occupation was **\$40.88**.
- **35.1%** of the 2018 jobs were in the **Computer systems design and related services** industry sector.
- Ottawa has a significantly **higher share of this occupation** than the nation.
- **Provincially**, this occupation showed an increase from 2016 to 2018 (**14.9%**); it is expected to increase over the next three years (**7.0%**).
- *Canada Job Bank* forecasted **good** employment potential for this occupation in Ottawa from 2018-2020.

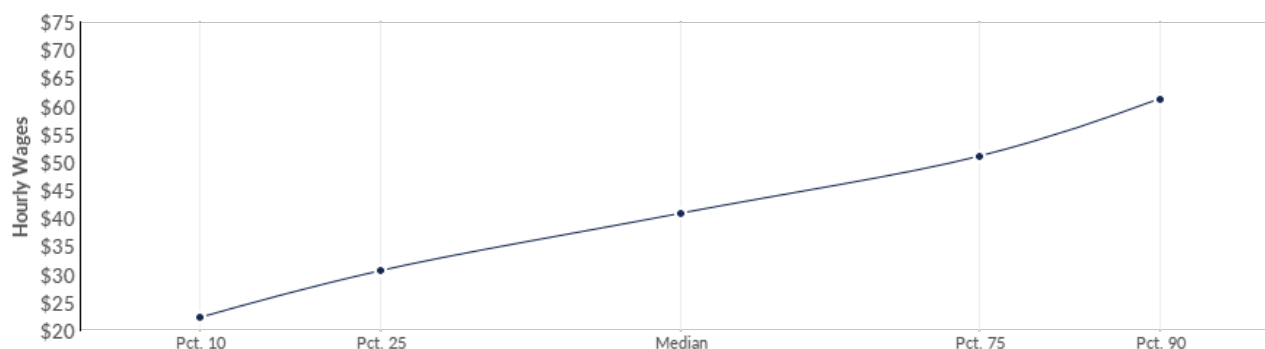
### Overview

<b>Ottawa Jobs (2018)</b>	<b>13,377</b> (9% self-employed = 1,153)		
<b>2016 Ottawa Unemployment Rate</b>	<b>3.3%</b>	Ontario	<b>3.6%</b>
<b>Location Quotient to Nation (2018)</b>	<b>2.52</b>		
<b>Change in Jobs (2016 - 2018)</b>	<b>3.4%</b>	(2018 - 2021)	<b>2.6%</b>

*NOTE: Location quotient (LQ) is a way of quantifying how concentrated a particular occupation is in a region compared to the nation or province. A quotient of 1.00 means Ottawa has the same share of the occupation as the nation/province. A quotient higher than 1.00 means Ottawa has a greater share, and lower than 1.00 means Ottawa's share is lower than the average.*

### OTTAWA | Percentile Earnings (not including self-employed)

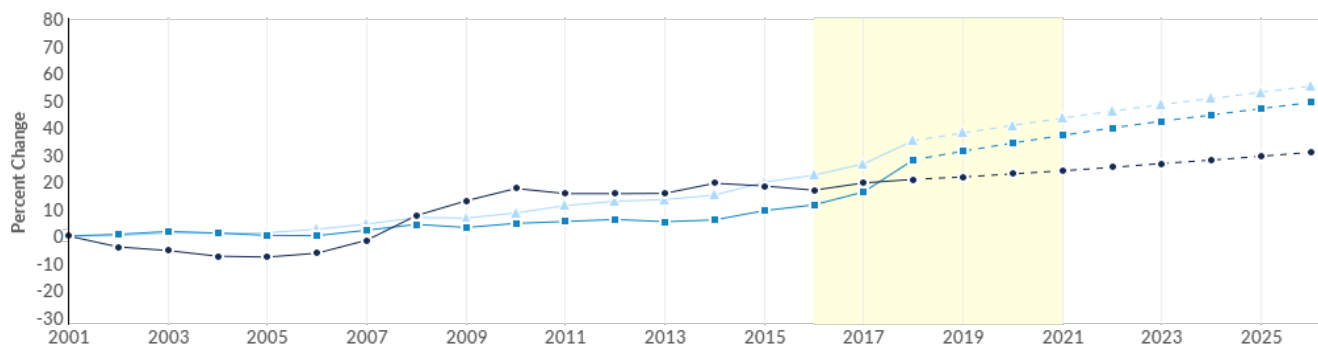
<b>\$30.66/hr</b>	<b>\$40.88/hr</b>	<b>\$51.10/hr</b>
<b>25th Percentile Wages</b>	<b>Median Wages</b>	<b>75th Percentile Wages</b>



## Ottawa | Growth

<b>12,937</b> 2016 Jobs	<b>13,728</b> 2021 Jobs	<b>791</b> Change (2016-2021)	<b>6.1%</b> % Change (2016-2021)
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## Regional Trends



Region	2016 Jobs	2021 Jobs	Change	% Change
● Ottawa	12,937	13,728	791	6.1%
● Ontario	69,317	85,223	15,906	22.9%
● Canada	150,077	175,762	25,685	17.1%

	Ottawa	Ontario	Canada
2016 Jobs	12,937	69,317	150,077
2017 Jobs	13,234	72,289	155,188
2018 Jobs	13,377	79,644	165,619
2019 Jobs	13,476	81,596	169,108
2020 Jobs	13,602	83,481	172,552
2021 Jobs	13,728	85,223	175,762

## Ottawa | Industries Employing this Occupation

Industry	Occupation Jobs in Industry (2018)	% of Occupation in Industry (2018)	% of Total Jobs in Industry (2018)
Computer systems design and related services	4,690	35.1%	21.0%
Other federal services (9112-9119)	2,830	21.2%	3.3%
Software publishers	762	5.7%	25.4%
Computer and communications equipment and supplies merchant wholesalers	544	4.1%	7.9%
Scientific research and development services	403	3.0%	6.5%

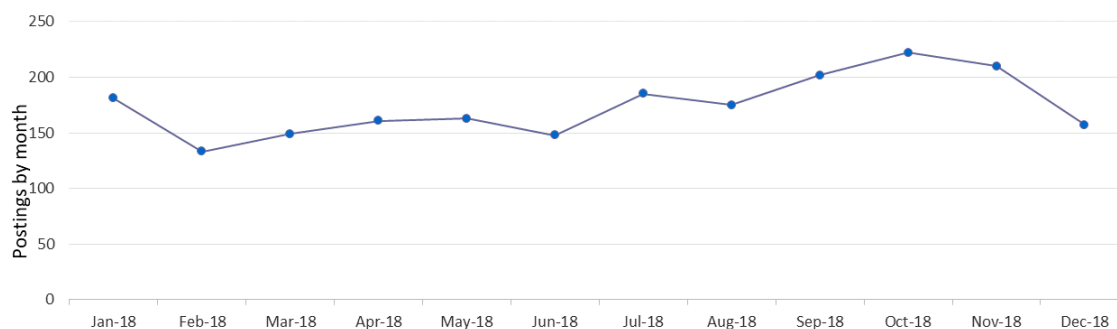
*NOTE: Inverse staffing patterns provides a table of percentages that shows how regional occupations are divided up among regional industries. For example, an inverse staffing pattern for registered nurses may show that 70% of RNs are employed by hospitals, 10% by local government (i.e., public schools), 10% by nursing homes, and 10% by offices of physicians.*

## Educational programs and completions in Ottawa (public institutions only)

9 Programs (2016)		962 Completions (2016)
CIP Code	Program	Completions (2016)
50.04	Design and applied arts	254
11.07	Computer science	233
15.12	Computer engineering technologies/technicians	192
11.02	Computer programming	180
11.08	Computer software and media applications	77

*NOTE: EMSI Analyst uses Statistics Canada's PSIS data to compile completions for postsecondary programs offered in Canada, classified by the 2016 CIP codes. 2016 data includes those who graduated in spring 2017.*

## Job Postings by Month



Total annual job postings: 2,086

*NOTE: Based on newly published job postings first found between January 01, 2018 and December 31, 2018 AND location is Ottawa Census Sub-division, Vicinity Jobs.*

## Other Considerations

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**LICENSURE/OTHER REQUIREMENTS FOR ONTARIO:** None required (**not** a regulated profession)

*NOTE: Workers in regulated occupations require a licence to work legally. Workers in non-regulated occupations do not require a licence, but employers may have other certification requirements.*

**CANADIAN LANGUAGE BENCHMARKS:** N/A

## Links to Additional Occupational Information

[Ontario Job Futures](#) – NOC 2174 Computer programmers and interactive media developers

[GOC Job Bank](#) – Cites outlook information for Ottawa, as well as Ontario and Canada; also shows job postings and wage information for Ottawa.

[Statistics Canada - Occupation information for NOC 2174](#)

[Ontario Skills Passport - Skills profile for Computer programmers and interactive media developers](#) –

Note that this website categorizes occupations using the NOC 2006 classification system; as such, occupation titles may not match the titles used by the NOC 2011 system.

## About EMSI Occupational data

Economic Modeling Specialists Inc. (EMSI) amalgamates information from several data sources in order to produce its occupation counts:

- Canadian Business Patterns (CBP) – *Updated December 2018*
- Census – *2016*
- Survey of Employment, Payrolls and Hours (SEPH) – *Updated December 2018*
- Labour Force Survey (LFS) – *2018*
- Canadian Occupational Projection System (COPS) – *Latest projections cover 2016-2026*
- Demographic CANSIM tables – *Various updates*
- Postsecondary Student Information System (PSIS) - *Updated annually; 2016/17 data available now*

Information from these sources is combined into a dataset that is updated twice annually by EMSI; the latest release came in the Spring of 2019 and these reports reflect actuals and projections based on that data. Detailed occupation data is based primarily on industry staffing patterns collected by the SEPH, which surveys businesses and is considered more reliable than the LFS, which surveys individuals.

**NOTE:** In 2016, EMSI Analyst switched from the NOC-S 2006 occupation classification system to the NOC 2011 occupation classification system. Some occupation titles and groupings have been modified slightly as a result; all historical data has been adjusted to match the NOC 2011 classification system.

*Should you have any further questions about the data in this report, please contact **Ottawa Employment Hub** at 613-727-4723 X6873 or [info@OttawaEmploymentHub.com](mailto:info@OttawaEmploymentHub.com)*