# Paul Xu

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## **SUMMARY OF QUALIFICATIONS**

- Advanced data analytic skills and statistical modeling in Python (PyNum, PyPlot), R (forecast, tseries, car, MASS, glmulti, arima), SQL, SAS
- Ongoing training full-stack web development skills (frontend, backend) with portfolio project based
- Actively developing data science skills (data/text mining, machine learning, natural language processing)
- Extensive experiences in volunteering for 6 years including 2 years at executive level position

### **EDUCATION**

University of Waterloo, Waterloo, ON

September 2013–December 2018

**Bachelor of Honor Mathematics** 

Major: Statistics | Option: Computer Science

- Relevant Coursework: Algorithm and Data Structure, Database Management, Management Information Systems, Computer Simulation, Stochastic Process, Time Series and Forecasting, Generalized Linear Models
- Selected Awards: The 3<sup>rd</sup> Place in 2014 Integration Bee, Top 5% in 2013 Euclid Contest
- Technical Skills: Python (5 years) | R (4 years) | SAS+SQL (6 months)

University of Toronto, Toronto, ON

January 2019–June 2019

Full Stack Flex Professional Program

- Technical Skills:
- Brower Based Technology (HTML, CSS, JavaScript, jQuery, Responsive Design, Bootstrap, Handlebars. Cookies, Local Storage, React.js); Java; Databases (MySQL, MongoDB); Quality Assurance (Writing Test)
- Deployment (Heroku, Git); Server-Side Development (Express.js, React.js, Node.js)

### **WORK EXPERIENCES AND PROJECTS**

Research Assistant, Wilfrid Laurier University, ON

July 2018–December 2018

- Administrated 600,000+ data (annual) for 1000+ companies within the range of 15+ financial parameters covered the year (1985-2018) and standardized data formatting achieved by SQL and Excel
- Identified the existence of 2 million missing data (seasonal), computed the approximate value after completing annual data adjustment and overwrote the seasonal data under approximation method via R and Excel

[London Whether Analysis], Python Side Project, London, ON

September 2018

- Selected real historical weather data in London referenced from Historical Climate Data Government of Canada covering the period from 1884 to 2017 and initiated loading the tabular into Python environment
- Invoked NumPy, Pandas, StatsModels and Matplotlib and implemented codes to describe different statistical features of a single measured variate among three categories (measures of location, variability and shape)

Research Assistant, University of Waterloo, ON

January 2018–April 2018

- Selected 200+ AI professors to network with for a conference database, extracted information cross-referenced with external publications and classified by research held using SQL, SAS and Excel
- Simulated 5000+ samples from Facebook users' database, brainstormed for both strengths and limitations of trusted AI models and reinforced them for testing their efficiencies using RStudio

Regression Analysis Group Project, University of Waterloo, ON

May 2016-August 2016

- Employed linear regression method to fitting between response variable versus 10 independent variables among 400+ data pairs and illustrated the association among those covariates through software R
- Deployed backward selection and conducted variance analysis for best-fitting parametric and dispersion model through R in the position of programming secretary

## **ACTIVITIES AND VOLUNTEERING EXPERIENCES**

Canada Day Executive, Waterloo, ON

July 2016/July 2017

- Supported logistics management by optimizing shifting schedule for 6 team members and enhanced efficiency by approximate 40% and organized creative info sessions activities for group training purposes (on/offline)
- Was asked for a return to the executive team for strong organization and communication skills in the next national ceremony in the local area