

# KEVIN LU

CS Intern

## SKILLS

- Frontend: HTML/JS/CSS, React/JSS
- Backend: PHP, Flask, PostgreSQL, MongoDB, Heroku
- Data Science: Jupyter, SQL, Numpy/Pandas/SKLearn, Keras/TF
- Other languages: C++, Python, Bash, Excel, Latex, Mathematica

## AWARDS

- Faculty of Mathematics Entrance Scholarship \$10,000 (2021)
- President's Scholarship of Distinction \$2,000 (2021)
- R.A. Pyke Scholarship for Mathematic recipient: \$500 (2021)
- LGen Quinn Award Runner Up for Musical Excellence: \$125 (2021)

## ACHIVEMENTS

- Qualifier of Canadian Math Olympiad (2020) (top ~50 in Canada)
- 3 time qualifier of American Invitational Math Examination (top 5% of test-takers) (2019-2021)
- 3 time top in school for Canadian Computing Competition (2019-2021)
- USA Computing Olympiad Gold Qualifier (2020)

## GET IN TOUCH

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## WORK HISTORY

### Tutor

Math4Me, 2018 Spring

- Tutored students for Math, Sciences and English
- Tutored 4 students at a time for 4 hours a week

### Web Developer and Media Assistant

Chinese Christian Ministry Canada, 2019-2020 Summers

- Developed Wordpress website using HTML/JS/CSS/PHP (<https://communitycare.ccmcanada.org/>)
  - Maintained website throughout school year
- Created stop-motion movie as cover image

### Technical Reviewer for "Mastering spaCy"

Packt, 2021

- Technical reviewer for Packt's NLP book "Mastering spaCy"

## CODING PROJECTS

### PyATE Python package for ATE, 2020-present

- Automated term extraction using five different algorithms based on research through eight papers
- 25,000 downloads on pip
- Demo at <https://pyate-demo.herokuapp.com/> using React/Flask

### Recycler: CV for classifying recyclables, 2020

- Fine-tuned Google's Xception CNN on the Trashnet database
- Trained on Keras up to 87% accuracy

### Touchscreen using Wii Remote and IR Pen, 2020

- Turn any screen into a touchscreen using a Wii Remote and infrared pen
- Inspired by Johnny Chung's Wiimote project; recreated the software in Python

### Research Mode: Chrome Extension for Research Assistance, 2020-present

- Adds a convenient sidebar for easy access to notes while conducting research, including reading, writing, and deleting notes, which are synced to a database
- Simplifies current page and highlights and defines technical terms
- Uses React for frontend, PostgreSQL to store notes, with a Flask backend, which ran on Heroku

### Machine Learning for Predicting Rent prices, 2021

- Achieved 90% mean accuracy in predicting rent prices in Regina using random forest regression

## EDUCATION

### University of Waterloo

Bachelors of Computer Sciences (Co-op), 2021-present

### Sir Winston Churchill Secondary School

International Baccalaureate Diploma Program, 2019-2021

- IB Predicted Score of 40/45 (top 5% in school, 96% average)
- Instructor of Advanced Group in code club, head coach of Math Challengers team, executive for numerous other clubs