

---

**EDUCATION**

---

- **University of Guelph** Guelph, ON, Canada  
*Masters in Computer Science; GPA: 3.77* *Jan 2018 – Dec 2019*
- **Anna University** Chennai, India  
*Bachelors in Computer Science and Engineering* *Apr 2013 – Apr 2017*
- **Coursera Deep Learning Specialization** Canada  
*Courses: Neural Networks and Deep Learning, Optimization and Regularization in Deep Neural Networks* *Canada*

---

**EXPERIENCE**

---

- **University of Guelph** Guelph, ON, Canada  
*Developer-ML & Research Assistant* *Sep 2019 - Dec 2019*
  - Analyzed structural composition of whole wheat bread and bread with different protein compositions using Marker Based Watershed Algorithm for image segmentation and feature extraction using GLCM, Haralick features. Performed data cleaning, data transformation, model development, and model validation.
  - Implemented U-Net , R-CNN architectures and compared classification performance.
  - Tools: OpenCV, Numpy, Pandas, Keras, Tensorflow.
- **University of Guelph** Guelph, ON, Canada  
*Graduate Research Assistant* *Apr 2018 - Aug 2019*
  - Implemented SPEA-2(Strength Pareto Evolutionary Algorithm-2) multi-objective evolutionary algorithm using Julia programming.
  - Experimented various plugins such as clustering, anomaly detectors and support vector machines on top of SPEA-2 framework in its ability to obtain Pareto optimal solutions.
  - Link to my thesis <http://hdl.handle.net/10214/17498>.
- **University of Guelph** Guelph, ON, Canada  
*Graduate Teaching Assistant* *Jan 2018 - Apr 2019*
  - Assigned the following courses to provide assistance to professors and students
  - System Analysis and Design of Computer Applications.
  - Introduction to C Programming.
- **Strobilanthes** Chennai, India  
*Application Developer* *Apr 2017 - Dec 2017*
  - Developed Location Services API for Android Application using Firebase Real-Time Database and Google Maps API in order to provide optimized location aware context-based information to clientele.
  - Implemented frameworks such as Volley, GSON, and OkHTTP for a quicker request-response system.
  - Incorporated Firebase Cloud Messaging for Push Notifications within the Application.

---

**PROJECTS**

---

- *Cost of Living*: Exploratory data analysis and visualization in understanding the effect of apartment cost towards salary
- *Book Recommender System*: Recommending books to users using collaborative filtering on public datasets.
- *Sum Product Networks*: Deep probabilistic networks that provides bayesian inference based on input arguments.
- *Project Locato*: Object tagging and location tracking with built in database,caching and NFC support using Android Studio IDE.
- *PC-World RSS Reader*: RSS reader specifically on latest PC-World news implemented using async task and listview class following google material design guidelines.
- *BookHouse*: Developed a book selling portal using Parse Backend. Application supports Parse authentication,storage and push notifications.

---

**PROGRAMMING SKILLS**

---

- **Languages**: Python, Java, Julia, C++, C, SQL
- **Technologies**: Docker, Numpy, Pandas, Scikit-learn, Tensorflow, Keras, Matplotlib, OpenCV, Scikit-Image, GDB
- **Others** : Jupyter, Git, Agile, Github, Android Studio, Vim, Linux(Fedora), VS code, IntelliJ