

FEI-FEI(SOPHIA) ZHENG

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WHO AM I

I am super passionate about solving problems by science and technology. I am strong self-motivated quick learner and I love to keep things organized. I have my own way of organizing and digesting knowledge and apply it across disciplines. My excellent communication and critical thinking skills help me getting things done collaboratively with others.

Currently I live in Toronto and working in IBM Supply Chain team. My interests in computer science area are in software design and computer vision. I'm a frequent visitor to Udacity, Coursera, Lynda, InfoQ to keep my knowledge to up to date. But I am not entirely geeky, since I also build hand crafts and play Chinese classical music instruments in spare time.

WHAT I KNOW

- Motivated **Software Engineer** with strong analytical, programming and problem-solving experience
- In-depth understanding of **Data Structure, Algorithms** and **OOP** principles
- In-depth understanding of **Web, Mobile, Database** and other software design best practices
- Love using **Git** version control, especially when working with other geeks
- Excellent **communication** skills and great team player
- **Quick learner** and ability to work under pressure with time management skills
- **Good motivator**, enthusiastic and passionate about new tools and technology

WHAT I AM GOOD AT

- Programming: NodeJS, Python, Java, PostgreSQL
- Framework & Tools: React JS, Express JS, Angular, D3.js, RESTful API, OAuth2
- DevOps: Git, Docker, AWS EC2
- AI & Mathematics: OpenCV, NumPy, MATLAB
- Platforms: Linux (Alpine, CentOS), MacOS, Windows

WHAT I LEARNED

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| 2016.1 – 2021.4 | B.Sc. Honored Major, Computer Science
<i>Lassonde School of Engineering, York University</i> |
| 2017.6 – 2017.8 | Machine Learning Certificate
<i>Stanford University (via Coursera)</i> |
| 2014 – 2016 | Advanced Diploma, Graphic Design
<i>Seneca College</i> |

WHAT I AM DOING AND WHAT I DID

2021.5 - present	Software Developer, IBM <ul style="list-style-type: none">- Developed new features with IBM Carbon Design System for IBM Sterling Business Transaction Intelligence Tool.- Improved existing features for UX enhancement.- Collaborated with team members for large defect fixes.- Produced the front-end for web application with various technologies, but not limited to: HTML, CSS, Angular, TypeScript, Git, NodeJS.
2019.9 – 2021.4	Frontend Developer Intern, IBM <ul style="list-style-type: none">- Worked in an Agile, collaborative environment to understand requirements, design, code, and test applications.- Produced the front-end for web application with various technologies, but not limited to: HTML, CSS, ReactJS, Angular, TypeScript, Git, NodeJS.- Implemented new features for Carbon Charts and Carbon Design System, provide unit tests and solve issues with D3.js and Vanilla JavaScript.- Employed Design Thinking to create features that provide a great user experience.
2018.5 – 2019.4	Computer Vision Research Assistant, York University CVR <ul style="list-style-type: none">- Participated in Intelligent Systems for Sustainable Urban Mobility (ISSUM) project- Evaluated and compared state of art algorithms for specified datasets via Python and MATLAB- Assist postdoctoral fellows in research process with programming and Mathematical knowledge and skills- Analyzed and tested Auto Camera Calibration with Manhattan Frame Estimation and Unsupervised Crowd Counting- Took the initiative to learn the knowledge about computer vision algorithms (Geo Camera Calibration, SIFT, PCA, etc.)

WHAT I HAVE DONE FOR FUN

RSME web application (<https://github.com/sophiiae/rsme>)

- Built a web application that auto generates resume in PDF
- It gets user profile information with given binding permission from LinkedIn via **LinkedIn, RESTful API** and **OAuth2** and gets code contribution chart from **GitHub** with given username
- The project is written in **Node.js** and **Express.js** with various of Node.js libraries, including **request, PDFKit, xpath, xmldom, mustache-express**, etc.
- Deployed to AWS using Docker container
(<https://cloud.docker.com/u/sophiiae/repository/docker/sophiiae/rsme>)

Lane Detection (<https://github.com/sophiiae/AdvancedLaneDetection>)

- Designed an algorithm to recognize lane marks from image and video without camera calibration
- It includes image color analysis, filtering, perspective transform and sliding windows
- The dataset is chosen randomly without camera specification
- The project uses **Python** libraries include **Matplotlib**, **OpenCV** and **NumPy**