

Jiaxu Chen

DATA SCIENTIST

jiaxuchen16@gmail.com
778-926-9764
[linkedin.com/in/jiaxuchenyvr/](https://www.linkedin.com/in/jiaxuchenyvr/)
github.com/CarloCHEN

Skills

- ❑ Database
 - SQL
- ❑ Programming
 - Python, R, Java, C, C++
- ❑ Statistics
 - Hypothesis Testing, A/B testing, Parametric/Non-Parametric tests
- ❑ Data Visualization
 - Tableau, Plotly, Seaborn, Bokeh, Matplotlib, ggplot2
- ❑ Machine Learning and Neural Networks
 - TensorFlow, PyTorch, Scikit-learn, Keras
- ❑ Big Data
 - AWS, Hadoop, Spark, Hive

Profile

Motivated by my goal of exploring the insights from data and my strengths in data analysis and programming, I transformed myself from a biomedical engineer to a data scientist.

As a data scientist with 7 years' experience in medical implant and microelectronics design, I am able to provide diverse perspectives and develop insightful problem-solving data science solutions that drive effective decision-making in a variety of fields.

PROJECTS

A novel accountability partnership system for Microsoft Teams | Microsoft x BrainStation Remote Hackathon Project

APR 2020, VANCOUVER, BC

- Scraped over 14k most recent tweets, and performed the sentiment prediction and analysis that reveals the loss of work accountability and productivity was the most concerned issue about work from home
- Collaborated with web developers and UX designers to develop a new accountability partnership system within Microsoft Teams for remote work connectivity, productivity and accountability improvement

Tweet Sentiment Extraction (NLP) | Kaggle Competition Project

MAR 2020 - Present, VANCOUVER, BC

- Text processing and sentiment analysis with NLTK, spaCy, and scipy.stats
- Predicted tweet sentiment with Machine Learning and LSTM models
- Extracted the phrase in tweets that reflects the sentiment using BERT model

Human Activity Recognition with Novel Machine Learning and Deep Learning Models | Individual Capstone Project

JAN 2020 - MAR 2020, VANCOUVER, BC

- Developed a novel attribute-based Machine Learning architecture with 93.55 % accuracy for new activity recognition with limited training data
- Designed and built an efficient Neural Network model (CNN-LSTM) with 99.36 % accuracy and quick computation (7s) for robust activity recognition

A Restaurant Recommendation Mobile App | BrainStation Hackathon Project

MAR 2020, VANCOUVER, BC

- Developed a restaurant recommendation app that deploys a novel "TRUST" restaurant rating algorithm, by working with web developers and UX designers

EDUCATION

BrainStation | Diploma, Data Science

JAN 2020 - MAR 2020, VANCOUVER, BC

University of British Columbia | Master of Applied Science, Biomedical Engineering

SEP 2016 - MAY 2019, VANCOUVER, BC

University of Shanghai for Science and Technology | Bachelor of Engineering, Medical Instrumentation Engineering

AUG 2012 - JUN 2016, SHANGHAI, CHINA

EXPERIENCE

Research Assistant | University of British Columbia

SEP 2016 - MAY 2019, VANCOUVER, BC

- Designed a wirelessly powered resonant stent experimentally (in vivo) shown to elevate the local blood temperature by 5 °C in restenosis treatment
- Developed a new omnidirectional independent antenna with 2.06 × higher wireless power transfer efficiency than conventional loop antenna
- Authored papers on 4 peer-reviewed journals with high impact-factors

Testing Centre Intern | MicroPort Medical (Group) Co., Ltd.

MAR 2015 - OCT 2015, SHANGHAI, CHINA

- Improved the product quality to 99.87% through optimization of the product mechanical performance testing
- Led the quality assurance (QA) process via validation of medical device design and development documentations



Carlo Chen

MASc at UBC Biomedical Engineering, QA Intern
at MicroPort Medical

I have excellent proficiency in coding with Python, R and also Java, and I have years of research experience with statistics. Backed by my extensive multidisciplinary research experience in medical device and microelectronics development, I am able to provide diverse perspectives in data science problems and develop insightful problem-solving solutions in a variety of fields. My cross-disciplinary experience makes me able to learn new things quickly and adapt to new work with flexibility.

Human Activity Recognition

Deep learning and machine learning for an activity recognition time series classification problem

✉ jiaxuchen16@gmail.com

 <https://www.linkedin.com/in/jiaxuchenyvr/>

