

QIANG LI

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EDUCATION

- ETH Zürich, IDEA Research Grant Student, GPA: 1.7/1.0** November 2019 - August 2020
- RWTH Aachen, M.Sc Computer Science, GPA: 2.2/1.0** October 2017 - October 2020
- Hefei University of Technology, B.Sc IoT Engineering, GPA: Top 3** September 2012 - June 2016

PROJECT EXPERIENCE

Accenture Since June 2021 -
Full-Time. Computer Vision Engineer • BMW • AIQX Project

- Develop several E2E pipelines including specialized CV models, various from **object detection, classification to segmentation and OCR**, and integrate it into a unified framework and innovation ecosystem.
- Leverage Visual Analytic and Artificial Intelligence to develop quality inspection solutions in manufacturing operations and cooperate with counterparts in various automotive plants worldwide.

Sinovation Ventures September 2020 - December 2020
AI Research Intern. GitHub • Toolkits: Django, GPT

- Focused the research on **Bert, GPT-2, GPT-3 model**, evaluated the performance of GPT-Based model and CPM (Chinese Pretrained Models) in 10 business scenarios, and developed corresponding API and preliminary software models based on Huggingface Transformers.
- Wrote one technical report about industrial applications of GPT-3, and responsible for the entire backend Django server and designed API interfaces to ensure smooth NLP text generation.

ETH Zurich IMSB Prof. Dr. Manfred Claassen Group November 2019 - August 2020
Masterand. GitHub • Toolkits: PyQt, YOLO, GhostNet, FasterRCNN

- Proposed a unifying approach enabling data-driven learning of morphological characteristics of Sezary Syndrome. Finished the master thesis: Cell Morphology Based Diagnosis of Cancer using Convolutional Neural Networks, rewarded as IDEA League Research Grant by RWTH and ETH Zürich.
- The paper about cell annotation tool for single-cell morphology data, has been accepted by AI for Public Health Workshop for poster presentation, accompanied by 2 minute spotlight talk on **ICLR 2021**.
- Developed CellNet software integrating with 12 algorithms and 8 data sets. Achieved 2nd place on the **Deecamp2020** medical track.

Siemens AG December 2018 - November 2019
Computer Vision Working Student • Toolkits: C++, Scikit-learn, PCA

- Data acquisition, handling, aggregating, and analytics for the monitoring of additive manufacturing process.
- Responsible for the development of Siemens Mindsphere cloud-based application **Maintenance App** and embedded image processing software.
- Designed **PCA, KMean and Colorspace Template Matching** algorithm for AM object detection and segmentation, invited talk **In-Process Control and In-Situ Monitoring for AM** on ICAM2020.

HONORS AND SCHOLARSHIPS

The AWS Certified Cloud Practitioner in August 2021
The RWTH Stipend in IDEA League Research Grant
The Siemens Automation meets Edge global University Challenge in 2018, 4th Prize
The Siemens Statistic/Six Sigma training in 2019, Yellow Belt Certification
The Europe BEST Engineering Competition in 2018, 2nd Prize in the case study, Europe region
The Connected Campus Idea Competition 2017 (CCIC), Top 7 in Berlin. Europe region
The Excellent student of Hefei University of Technology in 2016
The International Internet of Things Innovation in 2014, 3rd Prize in China
The International Robocup Robot Competition in 2014, 1st Prize in China, 12th Prize in Global

TECHNICAL STRENGTHS

Computer skills	Senior: Tensorflow, AWS Cloud, OpenShift, Azure Cloud Senior: Python, MySQL, PyQt, Flask Junior: Kubernetes, Apache Kafka, Docker
Languages skills	Native: Chinese Fluent: German(DSH-2), English(IELTS: B2) Intermediate: Korean

EXTRACURRICULAR ACTIVITIES

PayLift Zürich Fintech Startup February 2021 - June 2021
Computer Vision Engineer Intern • Website. Toolkits: Flask, Tensorflow, Mediapipe

- Built the core application from scratch as the full stack developer using FaceNet, Google Mediapipe and Egocentric HandNet for **biometric feature tracking and classification**.
- Responsible for Flask web application development, data collection and database construction. Report directly to the CEO and Co-founder.

Top AI Camp DeeCamp2020, Sinovation Ventures and UNDP July 2020 - August 2020
Candidate

- Completed two months of block seminars and projects with all data sets from real enterprise scenarios. All workshops are taught by frontline scientists, such as Andrew Ng and John Hopcroft.
- Rewarded as Best Team Leader prize and Excellent Performance Team prize, achieved 2nd place in track 1 (AI in Public Healthcare), Top 10 out of 41 teams in five tracks.

Hefei University of Technology, China November 2013 - November 2014
Radio broadcaster and Journalist • Relevant link

- Interviewed with 40+ entrepreneurs and excellent heads.
- Published 20+ articles on social platforms, college newspaper, provincial-level news media.
- Technical chair of university ICPC/ACM competition / Robocup Robot Soccer competition.

SELECT PUBLICATIONS

- **Q. Li**, O. Corin, L. Xu, *All you need is Cell Attention: A Cell Annotation Tool for Single-Cell Morphology Data*. The International Conference on Learning Representations (ICLR), Workshop on AI for Public Health, 03.2021.
- J. Haimid, **Q. Li** *Localization and visualization of defects by PCA, KMeans, Colorspace Template Matching for Additive Manufacturing*. Technical report in Siemens AG, Oral presentation on ICAM 2021.