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## PROGRAMMING SKILLS

- **Languages:** C/C++, Python, SQL, Go, Java, Scala, Javascript.
- **Skills:** Large Scale Distributed System, Performance Optimization, Data Processing Pipeline, Multiprogramming
- **Tools:** gRPC, Flume, Git, TensorFlow, PyTorch, Docker, Gradle, Maven, Django, ProtoBuf.

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## EXPERIENCE

- **Google, Inc.** Mountain View, CA  
*Senior Software Engineer @ Youtube Ads Infrastructure* May 2023 – Now  
*Software Engineer @ Youtube Ads Infrastructure* May 2019 – May 2023
  - Led the design and implementation for Youtube Ads build pipeline that handles 100k+ messages/second and delivers PB level data daily.
  - Devised an end to end dataset serving framework for Youtube Ads that automatically handle data canary, rollback and sharding, reducing the friction of dataset onboarding and improving the robustness of the system.
  - Conducted multiple optimization iterations that reduced the system's overall latency by 90% and saved resource cost by 50%.
  - Boosted Server efficiency by rebalancing processing between serving and build pipelines. Achieved 70% reduction of data loading time.
  - Designed and implemented emergency handling and production health maintenance procedures. Led and conducted release improvement which cut down release time by 50%.
  - Established E2E testing and regression testing framework for the Youtube Ads serving and build pipelines.
- **Google, Inc.** Mountain View, CA  
*Software Engineer Intern @ Display Ads Infrastructure* June 2018 – Sept 2018
  - Developed a data pipeline in **Flume** to generate user profile digest for ads recommendation, fixing 75% missing data generation and traffic tracking.
  - Deployed 10+ jobs through **Borg** and executed phased rollout.
  - Implemented an web UI using **Django** to monitor results of petabyte scale data service.
- **Intel Asia-Pacific R&D Center** Shanghai, China  
*Software Engineer Intern @ BigDL Data Analytics* Feb 2017 – July 2017
  - Used Bash and Python to efficiently port Neural Network modules from Scala to Python.
  - Designed memory shared mechanism for buffers in Neural Network modules that saves 50% of memory usage.
  - Built a graph converter in Scala that converts machine learning models into graphs to accelerate the training of NN modules.
- **Ailibi Medical Technology Co.** Shanghai, China  
*Software Engineer Intern* Dec 2014 – Feb 2015
  - Built and maintained the company's official website, which is a responsive website that is optimized for both desktop and mobile devices.
  - Conducted user requirements and specification investigation for the company's mobile app.

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## EDUCATION

- **University of California, San Diego** La Jolla, CA  
*Master of Science in Computer Science* Sept 2017 – Mar 2019
  - **Courses:** Operating Systems, Security, Database, Networked Systems, Neural Networks, Parallel Computing.
- **Shanghai Jiao Tong University** Shanghai, China  
*Bachelor of Science in Electrical and Computer Engineering* Sept 2013 – Aug 2017