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Work Experience

- 2017.01–now **Lenovo RT**, AR Team, Computing Platform Architect.
- Responsible for offline trained system of 3D reconstruction based on video.
 - Responsible for cloud recognition system based on rgb frame input.
 - Responsible for AR resource recommendation system based on user behavior logs.
 - Responsible for maintenance of big data and computing components cluster.
- 2015.10–2017.01 **Alibaba**, Platform Technical Department, Senior Engineer.
- Responsible for the specified item recommendation project to specified user in 1111.
 - Develop the project of sima/detail/cart/buy system optimization.
- 2011.02–2015.10 **CSSRC**, Platform Research Department, Architect.
- Responsible for the software product development of IBMS.
 - Responsible for 3D Rendering Engine to show CAD file in android platform.
 - Responsible for the software product development of TDM.
- 2009.01–2011.02 **CSSRC**, Platform Research Department, Senior Engineer.
- Develop and maintain the GIS platform(XEIZ)
- 2007.01–2009.01 **CSSRC**, Engineer.
- Develop the underground pipeline management system of GIS platform(XEIZ).

Education

- 2003.09–2006.03 **Master**, Jiangnan University, Computer Application Technology, Oracle-OCP.
- 1999.09–2003.07 **Bachelor**, Nanjing Audit University, Information Management And Information System.

Project Experience

- 2017.08–Now **Cloud Recognizaiton Platform based on CNN and Bow**, Leader.
- Develop the computing flow of encode image to vector using inception-v4 cnn model in tensorflow framework.
 - Develop the image index server using faiss library, which is privde rpc service using grpc.
 - Develop the distributed search server to call image index server.
- 2017.03–2017.07 **Cloud Recognition Platform based on post computation** , Leader.
- Develop the distributed image search framework using netty.
 - Develop the model realtime processing platform, mysql(binlog)->rocketmq->jstorm->configcenter.
 - Listenr on datanode of config center,refresh model(3D sparse model) in to memory which datanode is changed
 - Let all model can be loaded in different searching node fairly, we use consistently hash algorith.
 - The search nodes can be added or removed automatically.

- 2017.01–2017.05 **Offline trained System of 3D reconstruction based on video**, 2017 techworld core project, Architect.
- Develop the distributed offline job platform(job is isolated, computing node is load balance, job can be transfered to other node when the current node is down).
 - Capture the key frame from video, Extract the feature point using sift.
 - Match the feature point of different frame, refine the match result using RANSAC.
 - Computing the 3D location of feature point using camera parameter and match result.
 - Train the sparse model using 3D point and match result.
- 2017.04–Now **AR resource recommendation system**, Leader.
- Develop the log collection sdk of javascript version and java version ,each is for web page and android application, log is record in nginx.
 - Develop the log offline analysis system(log->flume->hdfs->hbase->mysql)
 - Develop the log realtime analysis system(log->flume->rocketmq->jstorm->redis)
 - Develop the AR resource metrics monitor system.
 - Develop the AR recommendation system based on user access log.
- 2016.05–2016.11 **Specified product recommendation system for specified user**, Alibaba 1111 core Project, Tech Leader.
- Add the log record in cart and buy system.
 - Deliver the specified promotion for specified item for specified user in specified time.
 - The item order in sima system is decide by item feature and user preference
- 2016.01–2016.05 **Sima/detail/cart/buy system optimization project**, Member.
- Split the big seller database using yugong (binlog) .
 - Add local cache for some hot item to protect the cache server, the invalidation rule of local cache is QPS+LRU.
 - Reduce the rpc calling count to optimize the qps threshold of rpc service
- 2014.07–2015.02 **3D rendering engine in android platform**, leader.
- Design the light format of cad file .
 - Develop the parsing module of light format file to logical model
 - Develop the module of converting the logical model to physical showing model .
 - Develop the 3d rendering view using opengles in android
 - Optimize the showing frame performance per second using vertex buffer etc.
- 2010.03–2012.01 **Testing Data Management System**, Architect.
- Develop the framework using struts1.2, spring, hibernate, freemake, jbpmm, etc components.
 - Develop the designing db model tool using eclipse emf, data navigation tool using eclipse gef and workflow tool using eclipse gef.
 - Develop the original testing data management cluster using hbase.
- 2008.05–2010.02 **GIS Platform**.
- Develop the service to computing diging area and underground pipeline whether they are cross .
 - Develop the 3D rendering tool to show underground pipeline
 - Maintain the Oracle spatial database and GeoServer service..