Yibei Ling
Principal Data Scientist - Iconectiv Subsidiary of Ericsson

Belle Mead, NJ - Email me on Indeed: indeed.com/r/Yibei-Ling/eb7033e7decdd4f9

To obtain a job position as a Data Analyst for analyzing and interpreting data to
provide organizations with effective problem solutions and optimize decision making.
Authorized to work in the US for any employer

WORK EXPERIENCE

principal data scientist
iconectiv   -   Piscataway, NJ   -   December 2011 to Present

\item Implemented an ETL application using Talend framework for
extracting daily CSCA from Oracle database, loading the data into MySQL database, including email
notification of processing status.
\item Importing/Exporting CSCA Oracle databases
\item Developed impala and Cloudera applications for SIMBox detections, including data extraction and
processing
\item Built voice-duration call models to distinguish SIMbox call and regular call service in an extremely large
data set, using various ML techniques
\item Proposed to use Cobb-Douglas model for modeling end-user satisfaction level
and developed algorithms to automatically choose some important some important performance
indices from a predefined list and determine these key performance indices using actual data
from carriers.
\item Developed database management system and performance tuning for ofCom NMS. Mainly involved in
the design and implementation of ofCom NMS database system, including database performance tuning, data
cleaning, parsing, and loading, and consistency checking.
\item Developed the iconectiv's flagship TV White Space (TVWS) database system and dynamic spectrum
sharing. Mainly involved in the design and implementation of TVWS Web service (server and client), SFTP
for real-time database-to-database synchronization among TVWS database group and XML validation and
signing and certification key management.

Principal data scientist
iconectiv   -   Piscataway, NJ   -   November 2011 to Present

Principal Data scientist
iconectiv   -   Piscataway, NJ   -   September 2011 to Present

data scientist

Senior Research Scientist
TVWS Web - September 1998 to December 2011

service (server and client), SFTP for real-time database-to-database
synchronization among TVWS database group and XML validation and signing and certification key
management.

Senior Research Scientist September 1998-December 2011
Applied Research, Telcordia (formerly Bellcore), Morristown, NJ

• Developed and invented a patented HTTP handoff scheme to support session con- tinuity in heterogeneous wireless (WiFi, CMDA, CDPD) environment for Toyota ITC

• Designed and implemented location-aware Telematics information gateway server for Toyota ITC, enabling fine-grained location-aware advertisement insert and multimedia streaming. The system was chosen by Toyota as technology showcase in Toyota exhibition in Tokyo and was ranked in top 5 among 20 demo systems in terms of technology novelty, market relevance and applicability.

• Let an effort to design and implement SIP server/client and VoIP-PSTN gateway for supporting location-aware phone-call for Toyota ITC

• Designed and developed the commercial-grade voice middleware system for Tel- cordia Notification System (TNS). The system can support and keep track of more than 200 simultaneous IVR (Interactive Voice Response) calls.

• Led to design and implement the demo system for simulating V2V communication over more than 200 vehicles in the Manhattan areas. Involved in the design and implementation of vehicle mobility model, simulating the message delivery performance in the presence of obstruction, vehicle speed using different radio models in QualNet (radio network simulator).

• Developed a multi-threading model that can exploit the multi-CPU system for Telcordias WINPLAN wireless propagation system.

• Designed and implemented a software-in-loop simulation for FCS (the future combat system) and DRAMA (distributed policy-based management system for mobile ad hoc networking) system for ARM Research lab

• Designed and implemented algorithms for compressing/decompressing VoIP packet (uLaw format), echo cancellation, and VoIP packet prediction and interpolation for Toyota ITC

• Designed and implemented Telcordia flagship IP Assure system for analyzing, and detecting configurations in switches, routers, and firewalls in a large enterprise network consisting of thousands of switches, routers, and firewalls, for. supporting a wide range of Cisco (IOS, CatOS, ASA, PIX), Juniper (Junos, Netscreen), Foundry based routing and switching products.

• Designed and implemented validation codes for BGP, MPLS, OSPF, VPN, ISIS, VLAN and QoS rules, including unit-testing and multi-unit testing. Telcordia IP Assure system received the 2009 Global Product Excellence in IP Network De- vice Configuration Assessment Customer Trust Award and the 2009 Tomorrows Technology Today Award for Network Configuration Assessment by Info Security Guide.

• Designed, implemented, and invented a patented novel localization method for in-door localization method based on ULTRA-Wideband for DARPA ACERT (Adaptive Cognition-Enhanced Radio Teams)

• Led to design and implement Bellcore flagship Airboss wireless middleware mes- saging systems, involved in the design and implementation of WAP gateway server, SMTP/POP3/IMAP proxy server for Microsoft Outlook

Developer, system architect
Dow Jones Market - June 1995 to September 1998

• Designed and implemented a distributed message queue for foreign currency ex- change system.
• Designed and implemented the interface between message queue and the in- memory database systems

SELECTED • Efficient Protocols for Identifying the Missing Tags in a Large RFID System,

EDUCATION

Ph.D. in Computer science
Florida State at Miami   -   Miami, FL
1995

M.S. in Biostatistics
Fudan University   -   Shanghai, CN
1988

SKILLS

DATABASE (10+ years), XML (10+ years), DATABASES (5 years), Hadoop (5 years), HADOOP (5 years)

ADDITIONAL INFORMATION

SKILLS Operating Systems: WINDOWS, Unix.
Relational Databases Oracle, MySQL, SQL Server, and PostgreSQL
NonSQL Systems Hadoop, MongoDB, Impala, Cloudera, HDFS, Hive, Hue
Graphical Database neo4j

Expertize Languages & Software: R, Matlab, Java, Python, C/C++, XML, Graphviz, KML
Operating Systems: WINDOWS, Unix.
Relational Databases Oracle, MySQL, SQL Server, and PostgreSQL
NonSQL Systems Hadoop, MongoDB, Impala, Cloudera, HDFS, Hive, Hue
Graphical Database neo4j

Expertize Expertize: Database Performance Tuning, Mathematical Modeling
Linear Programming, semidefinite programming, linear and non-linear regression and
classification, time series analysis, firewall analysis