Le Nguyen The Dat

WORKING EXPERIENCES

Head of Data Warehouse & Data Science – Zalora Group **May 2014 – Present**

- To be in charge of the company's data warehouse and data marts infrastructure.
- To build and manage the data warehouse and data science team.

Data Scientist, Programmer – Zalora Group **June 2013 – May 2014**

- Specialized in agile software development, cloud computing, data mining, classification techniques, and machine learning algorithms.
- Zalora's "first data scientist", designed and built:
  - Zalora's online shopping recommendation system for Onsite Marketing, SEM and CRM, resulted in 4-9% total revenue increase in multiple Zalora ventures. The engine has been deployed for the whole region.
  - Zalora's CRM data platform, fully integrated with Oracle Responsys.
  - The entire company's data warehouse infrastructure from the ground up - hosted on Amazon Web Service: from storage, ETL to data management.
  - Multiple internal decision support tools, automated reports, data marts, that are being deployed in Rocket Internet ventures globally. (These tools and infrastructure are heavily used by Marketing, Buying and Business Intelligent team accross all Zalora ventures on a daily basis.)
- In-use languages / technologies include: Haskell, Python, Unix Shell Scripts, Amazon EC2, S3, Redshift (Postgresql), and MySQL.

Research Engineer – A-STAR Data Storage Institute **July 2011 – June 2013**

- Specialized in data mining, classification techniques, machine learning algorithms, recommendation system, and computer networking.
- Conducted researches, algorithms design and develop full system for multiple projects:
  - Advanced Smart Caching logics dedicated for travel booking industry. Fully implemented, integrated, and deployed, potentially save more than 5% of A-STAR's Business Partner's annual cost.
  - Network Virtualization and Software Defined Network with OpenFlow. Develop and apply new algorithms for efficient traffic routing, load balancing, virtual machine placement techniques in scalable data center network.
  - Knowledge based data classification and recommendation system, built on top of Apache Mahout's collaborative filtering engine. Implemented functional and scalable Java / Python prototypes for travel industry with social network's data set.
- In-use technologies include State Map Compiler, Natural Language Processing technologies, Nox Controller, NS-3, Apache Mahout, NoSQL (MongoDB, OrientDB), RabbitMQ, and Celeryd.

Software Engineer – Plunify Pte Ltd **May 2011 – July 2011**

- Design, build and maintain a secure, efficient, and robust middleware for the company.
- Responsibilities:
  - Develop customized Java Libraries, required for the middleware system, including Amazon EC2, Amazon S3, SQL, and SSH Utility library.
  - Setup Plunify's Tomcat Server for mapping and distributing jobs to dedicated XML RPC Servers, each developed and designed for handling different types of task needed.
  - Develop a secure Plunify's standalone Java Uploader and Downloader Clients in conjunction with Amazon S3:
    - Build complete middleware infrastructure, connecting multiple clients with Plunify's Web Authentication PHP Server and Tomcat Server using dedicated XML RPC Servers.
    - Ensure fully encrypted data transfer over the network for Plunify's users, utilizing both 256-bit AES and 2048-bit RSA algorithms.
- In-use technologies include MySQL, XMLRPC, Cryptography Algorithms, and Amazon Web Services.

EDUCATION

University of Oxford, United Kingdom **Sep 2009 – Oct 2010**

Master of Science in Computer Science

- Top 3 students in three following courses: Automata - Logic and Games, Principle of (Functional) Programming Languages, and Program Analysis.

University of Nottingham, United Kingdom **Sep 2007 – Jul 2009**

Bachelor of Science in Computer Science (First Class Honours.)

- Exceptional results in the following courses: Advanced Mathematics for Computer Scientists (100/100), Derivation of Algorithm (99/100), Knowledge Representation and Reasoning (96/100), and Algorithms and Data Structure in Java (91/100).

International University of Ho Chi Minh City, Vietnam **Sep 2005 – Jul 2007**

Bachelor of Science in Computer Science

- Finished Foundation and First Year before got transferred to the University of Nottingham.
- Exceptional results in all the Programming and Mathematics courses, all with results of above 90/100.

Le Hong Phong High School for the Gifted, Vietnam **Sep 2002 – Jun 2005**

- Won First and Second Prizes of City Mathematics Olympiad, Ho Chi Minh City in 2003, 2004 and 2005

ACADEMIC WORKS

Bounded Checking in Objective Caml – University of Oxford **May 2010 – Sep 2010**

- A four-month individual project involving deep investigation into Haskell's Check Libraries to develop and implement an OCAML's Bounded Check library that can test OCAML programs efficiently and automatically.
- Successfully achieved accurate result from testing OCAML programs involving different value types, from Integer, Boolean, Character, Pair, Triple to List and Higher-Order Function.
- Proven result in working perfectly with Implication and Existence properties.

Capacity C Torch Problem – University of Nottingham **Sep 2008 – May 2009**

- A seven-month individual project involving design and implementation of algorithms for solving the most general form of the Torch Problem (also known as the bridge and flash light problem)
- Proven result in solving the problem precisely and efficiently:
    - Deliver solution for the Torch problem of 100 people within only 56 seconds (worst case scenario).
    - Shortest implementation of 277 lines of Haskell source code.

Rich-Media Document in Air – University of Nottingham. **Sep 2007 – May 2008**

- A seven-month group project that used Adobe AIR Framework to build an AIR application that can help the process of creating rich, interactive multimedia documents.
- Working in a development team of 3 member, responsible for investigating the AIR Framework, designing and developing the final product.

EXTRA-CURRICULAR ACTIVITIES

Photography Wedding, Portrait, and Landscape photography as a freelancer since early 2010.

REFERENCES

References will be provided upon request.