

# TUE M. BUI

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## SUMMARY OF QUALIFICATIONS

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- Data scientist with a strong software engineer background - 3 years of experience designing and implementing information systems.
- Ability to take a project from gathering requirements through actual launch of the project.
- Experience in communicating with customers, consultants collect requirements, describe software product features, and technical designs.
- Motivation and ability to work independently as well as work as part of a multi-disciplinary team.
- Strong ability to learn and to adapt quickly to new technology.

## EDUCATION

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**UNIVERSITY OF WASHINGTON, INFORMATION SCHOOL**, Seattle, WA (GPA 3.83) (June-2014)  
*Master of Science in Information Management*

**Stanford Online courses:** Machine learning (Coursera), Statistical Learning (OpenEdx)

**HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY**, Vietnam 2010  
*Bachelor of Science in Computer Science*

## RELEVANT PROJECTS

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*Data science projects:*

- Capstone project - Personalized Customer Experience (sponsored by ADP Cobalt): using Stanford NLP tools to do topic analysis on unstructured text data, and Hierarchical clustering (Gower distance) to do customer segmentation [http://tuebui.com/r-markdown/R\\_Analysis\\_blog.html](http://tuebui.com/r-markdown/R_Analysis_blog.html)
- Steam game clustering: Mined SteamCommunity.com social network, ran Hadoop MapReduce to compute common users between games, detected communities from game network and visualized it with D3js. [http://tuebui.com/d3js-result/steam\\_walktrap.html](http://tuebui.com/d3js-result/steam_walktrap.html).
- Using data (R & Python) from Yelp and NOAA to do exploratory analysis on user-reviewing behaviors under different types of weather. <http://tuebui.com/Yelp-Restaurant-Weather.pdf>
- Python Notebooks in data science classes: <http://tuebui.com/ipython-notebooks>
- Joining dataset with Hadoop streaming: <http://tuebui.com/?p=94>

*Semantic search engine powered by WordNet (<https://github.com/bomot113/WordNetSearch>)*

- Researched and developed a search engine based on Apache Lucene empowered by WordNet 3.0
- Put into practice a Word-sense disambiguation (NLP) algorithm to clarify the keywords in query strings and turn them into senses indexed in database

*An improved algorithm for encoding and decoding Reed-Muller code*

- Created new encoder/decoder for Reed-Muller error-correcting codes that are widely used in LTE networks.
- The implementation in C++ and explanation of this algorithm were posted here <http://tuebui.com/?p=188>

## RELATED EXPERIENCE

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**Net-Inspect.com, Software Engineer Internship, Kirkland, WA, US** Summer-2013  
*Worked on a web-based aerospace quality-control system as a developer role: Tuned up SQL queries for analytics feature by indexing, and caching tables, boosted queries processing over 25M records just in a second. Designed a hybrid foundation to migrate the company legacy web-form based to ASP.NET MVC application for scalable and testable development later on.*

**HARVEY NASH VIET NAM CO. LTD, Software Engineer, HO CHI MINH CITY, VIETNAM** 2009-2010  
*Worked on HR Management System ETWEB (Lumesse – Formerly Stepstone Solutions) as a developer role customizing HR web applications. Communicate directly to consultants around Europe to read, clarify specifications and then implement, customize core system for specific big companies such as: Kwizda, Hermes, Nexans, Taminco...*

- Took a part in the team's success, which caused the company to expand the team from 11 to around 30 members and delivered training for the new team members.
- Comprehensive project implementation from taking requirements to delivering update patches customizing HR management systems for more than 10 big companies.

Technologies used: ASP 3.0 (VBScript), SQL Server 2005.

**DEPARTMENT OF NATURAL RESOURCE & ENVIRONMENT, Software Engineer, HO CHI MINH CITY, VIETNAM** 2008-2009

*I took a part in private project of the department to manage concrete garbage collecting system and became a key developer in the project that required state-of-art geographic information management to survey garbage dumping in a City of Vietnam.*

- The project now is approved by the government and deployed gradually in all parts of the city.
- Received funding from the government after several month trial.

Technologies used: ArcGIS Server, SQL Server 2005, ASP.NET.

**SILKCOAST Co. LTD, Software Engineer, HO CHI MINH CITY, VIETNAM** 2007-2008

*I was entrepreneur with friends who provided a web application (web 2.0) to help tourists share their favorite locations with reviews, pictures, and positions, which would be helpful for others, who have never been Vietnam. My responsibility was to implement and manage all the back-end and a part of the front-end of this product.*

- Our product Focation.com (no longer working) was proud to be announced in O'Reilly WHERE 2.0 Conference 2008, California, (<http://www.youtube.com/watch?v=tghaLTjLYnY>).

Technologies used: JavaScript, Google Map API, C#, ASP.Net, SQL Server 2005, ArcGIS.