Quoc Anthony Doan

mythicalprogrammer@gmail.com
https://mythicalprogrammer.github.io/

Skills and Qualifications

Python, SQL, R, Javascript, PHP, Elixir, Vietnamese, Time Series Analysis, Statistic Models, Machine Learning, Random Forests, Decision Trees, Bayesian models, Natural Language Processing, Regression Analaysis, Linear models, Data Visualization, Web Development, GIS technology, QGIS, Dashboard Design, Linux, PostgreSQL, MySQL, SQL Server, T-SQL, Database design, Scrapy, Data management, Statistic Inference, Frequentist, Debian, VIM, Tmux

Education

Calif State University, Long Beach (2020)	**Master** of Science in **Applied Statistics** GPA: 3.727 Cum Laude
University of California, Riverside (2009)	**Bachelor** of Science in **Computer Science**

Employment History (**4 years** of Data Science & **over 10 years** of full stack web development)

**U.S. Department of Veterans Affairs (GLA)	Statistician**	Jan 2020 - Sept 2023

Supported over 20 research teams by producing **descriptive statistics**, **exploratory data analysis**, **machine learning models**, and **statistical models** to evaluate VA healthcare programs. Designed cohort, training, and testing **datasets** using **R**, **Python**, **Stata**, **SAS**, and **SQL**. Applied **NLP techniques** to **extract and analyze** time durations from unstructured text in field reports. Developed secure **visualizations** and **dashboards** in R, **SQL Server**, and **PowerBI**, aligning with HIPAA compliance to assess program effectiveness.

**NASA - Jet Propulsion Laboratory (JPL)	Data Scientist**	Summer 2018

Developed an internal tool using the **Python Flask web framework** and the **Vue.js JavaScript** framework to efficiently identify employees with specialized skills across the organization, facilitating project collaboration and optimizing resource allocation. Summer Internship.

**Food & Drug Administration, National Center Toxicological Research	Statistician**	Summer 2017

Developed a **predictive tool** in **R** using a **non-parametric Bayesian hierarchical model** to assess drug-induced liver injuries (DILI) in new and existing drugs. This **model** analyzes chemical profiles to **forecast** potential liver toxicity risks, addressing the gap in post-trial side effect monitoring for drugs that have passed FDA **clinical trials**. Summer Internship.

**Startup/Free Lance	Fullstack Web Developer**	2013 - 2016

– At Zipfworks redesigned the Bluepromocode website using **Ember.js** and **Bootstrap 3**. Developed a web crawler using **Python**'s **Scrapy** framework to collect data for Stylespotter. Built **RESTful** services in **Scala** using **SprayIO API framework** for both Stylespotter and ZipDesk, enhancing data access and system integration.
– At WhoYouAre created, maintained, and enhanced features for an existing **PHP** web app, and implemented a mailing list. Developed a product **web app** using **PHP Laravel** for Le Snob, conducted **technology reviews** to identify frameworks for scaling mass notifications, and led technology adoption and implementation strategies.

**University of California, Riverside Extension	Program Analyst II**	Jan 2011 - May 2013

Led **project management** and **software development** across multiple initiatives, overseeing two teams on various projects and bug fixes. Used **OracleDB**, **PHP Zend framework**, and **jQuery** to develop

tools that enhanced the **content management system**, including a cost estimation application for international programs, resulting in a **27% increase** in international student applications. Built **SQL**-based backend structures to improve operational efficiency and user engagement.

Publications

Nicholas Keisuke Brownell, Evan Shannon, **Quoc Doan**, Gregg C. Fonarow, and Boback Ziaeian (2023 Mar, 81). *Healthcare Utilization for US Veterans with Heart Failure during the Covid19 Pandemic* (Vol. 31 No. 8). J Am Coll Cardiol. 2023 Mar, 81 (8 Supplement) 536. (https://www.jacc.org/doi/full/10.1016/S0735-1097%2823%2900980-4)

Continuous Education (part time)

Foothill College	Los Altos Hills, CA
Geographic Information Systems Technology Certificate	2024 - present