Quoc A. Doan

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Education

California State University, Long Beach   Long Beach, CA
Master of Science in Applied Statistics (Biostatistic focus)   *2016 - 2019 GPA: 3.80*

University of California, Riverside   Riverside, CA
Bachelor of Science in Computer Science   *2004 - 2009*

Thesis

Tree-based Ensemble Classification Algorithm for High Dimensional Data   CSULB
Master of Science in Applied Statistics

Employment History

U.S. Department of Veterans Affairs (GLA)   Los Angeles, CA
Statistician GS 12 step 4   *Jan 2020 - present*
  – Create cohort base on inclusion, exclusion criteria for statistical models.
  – Create predictors/features from medical data for statistical models to help answer research paper's
    main objective (hypothesis).
  – Use NLP to search for medical records (CDWWork)
  – Handle PHI data
  – Help publish research papers within the public health domain for VA
  – Create models to answer researchers' questions
  – Create visualizations and dashboards from data sources
  – Technologies: Microsoft SQL Server, Microsoft PowerBI, AWS, AWS RDS, R, Stata, SQL
  – Full time position, 40 hours a week

NASA - Jet Propulsion Laboratory (JPL)   Pasadena, CA
Data Scientist - Summer Internship   *Summer 2018*
  – NDA under federal law, have references.

FDA - Food & Drug Administration - National Center Toxicological Research Jefferson, AK
Summer Internship   *Summer 2017*
  – Implemented non-parametric Bayesian hierarchical model using Chinese restaurant process in R to
    predict drug induced liver injuries (DILI). This model was going to be use to predict new and old
    drugs on the market to see if there is a possibility of toxicity base on other known drugs with similar
    chemical profile.

Startup/Free Lance   Los Angeles, CA
Fullstack Web Developer   *2013 - 2016*
  – At Zipfworks, redesigning Bluepromocode website using Ember.js and Bootstrap 3. Created web
    crawler/spider using Python's Scrapy framework to scrape website for Stylespotter. Created restful
    service for Stylespotter and ZipDesk using Scala's spray framework so that Ember.js frontend can talk
    to the backend.
  – At WhoYouAre, create, maintain, and adding features to existing web app & created mailing list.
    Created product web app for the brand Le Snob. Technology review of possible framework to use and
    technology to scale mass notification.

University of California, Riverside Extension   Riverside, CA
Program Analyst II   *Jan 2011 - May 2013*
  – Responsibilities includes: Project management, create software, mentor programmers, gather users'
    requirements and write project spec, guideline security, and software development cycle.
  – Projects: Extending the internal content management system and creating tools for it. One was to
    update classes for UCR extension. Another tool is to keep a record of credit card for refund. Created
    a tool to estimate the cost for international students to take UCR 2 years business program. All tools
    are web base and the backend was SQL which I created the tables and models for.

Technical Skills

Languages: Elixir, Javascript, PHP, Python, R, SQL

Statistic & Machine Learning Algorithms: ARIMA, CART, CERP, Markov Chain Monte Carlo, PCA
(Principal Component Analysis), Random Forest, Regression, SARIMA

Frameworks & Libraries: Laravel, Flask, Phoenix, Scrapy

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)
Pending authors . *Pending Title - My Health Veteran Online Utilization and Comorbidities* 2023

Portfolio

Fumigate   www.fumigatedb.com
Version 0.1.0   *Summer 2018 - 2021*
  – I created this website as an authoritative website for perfume. Technology stack is Phoenix web
    framework. Bootstrap for responsive design and SEO friendly. PostgreSQL for data storage. Server is
    on Digital Ocean VPS. Ubuntu 18.04 is the OS and was hardened by me. Data is web scraped using
    scrapy web scrape framework.

Predictive Model for Detecting Toxicity in Drugs
FDA - Food & Drug Administration - National Center Toxicological Research   *2017*
  – Implemented non-parametric Bayesian hierarchical model using Chinese restaurant process in R to
    predict drug induced liver injuries (DILI). This model was going to be use to predict new and old
    drugs on the market to see if there is a possibility of toxicity base on other known drugs with similar
    chemical profile. Nonparametric Bayesian is used so that the model can extend to multiple data
    sources, beyond DILI, to make prediction.

Le Snob   www.lesnob.com
                                                                           2014
  – Fashion website that sell high end luxury fashion for Le Snob brand. Web designer designed the
    website. I was responsible for translating it into code (PHP, CSS, HTML, Javascript) and for
    deployment.

Bluepromocode   www.dealspotr.com
                                                                           2013
  – Redesigned Bluepromocode website using Scala, Ember.js, and Bootstrap 3. Website is renamed to
    Dealspotr.

Stylespotter www.stylespotter.com
2013

– Helped create spiders to web crawl fashion websites and then upload the scraped data onto MongoDB. Scrapy was the webscraping framework used.

PaeDae API www.github.com/PaeDae/paedae-unity-wrapper
2013

– PaeDae's API Unity Wrapper enabling Unity3D applications to integrate with PaeDae web services and serve advertisements.

Baublebox www.baublebox.com
2013

– Reviewed PHP's code, most of the code was on FuelPHP MVC framework. Gave suggestions on refactoring existing code and how to use MVC framework.

UCR Extension Memorandum of Understanding mou.extension.ucr.edu
2012

– The whole website code is on the Zend MVC framework using PHP language. There is an internal web tool to control the layout and links.

UCR Extension Program Fee www.iep.ucr.edu/dates_and_fees.php
2011

– This is a tool to give potential international students an idea how much studying aboard with UCR cost. I coded this using Zend MVC framework, jQuery, and SQL. Some of the design changed especially the header but my overall code is still intact. The SQL table and schemas were created and design by me.