# JONATHAN NGUYEN

Career-focused job seeker, anxious to obtain an entry-level Software Engineering position to help launch career while achieving company goals.

## **CONTACT**

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## **SKILLS**

#### **Programming**

Java Python C Assembly HTML/CSS



#### Frameworks

Django Spring Boot Ruby on Rails React



#### **Operating Systems**

MacOS Linux



## Software & Tools

Machine Learning

(e.g. Tensorflow, Keras, ...)

Visualisation

(e.g. matplotlib, seaborn, ...)

Data handling/analysis

(e.g. numpy, scipy, pandas, ...)

Office



**English** 



## **COURSEWORK**

- Design and Analysis of Algorithms
- Automated Learning and Data Analysis
- Optimization and Algorithms
- Neural Networks
- Database Management Systems
- Object Oriented Design and Development
- Software Engineering
- Computer Networks
- Data Structures
- C and Software Tools

#### **CERTIFICATES**

North Carolina State University Computer Programming Certificate, Spring 2020

### **WORK HISTORY**

iii 06/2017 - 07/2020**♀** Parsons, Raleigh

Associate Road and Highway Engineer

- Constructed plans for noise walls, provided detail sheets for retaining walls, and made typicals to match plans on a \$350 million design build proposal for Raleigh I-440.
- Provided QA/QC, generated pavement removal sheets, and supplied detail sheets for roundabouts on a \$270 million rebuild of I-270 in Missouri.
- Prepared demolition plans and details for intersections on West Lake Corridor design build pursuit

## **EDUCATION**

**6** 08/2020 - 12/2021

♥ North Carolina State University, Raleigh

Master of Science Computer Science

**1** 08/2013 - 05/2017

North Carolina State University, Raleigh

Bachelor of Science Civil Engineering

## **PROJECTS**

#### **Web Application**

- Teamed with 2 people to deliver an eLearning Commerce web application using Ruby on Rails.
- Implemented backend functionality, such as creating a user, registering for a course, and allowing students to make reviews for teachers.

#### **Data Analysis**

- Analyzed over 400,000 lines of potential question duplicate pairs, with the goal to identify which questions on Quora share the same intent as existing questions
- Evaluated three different classifiers such as CNN, LSTM, Naive Bayesian to compare the predictions against an evaluation metric.
- Investigated different methods to extract features for Natural Language Processing and implemented Word2vec and Bag-of-words to models.

#### **Course Registration Application**

- Programmed a course registration system in Java that allows students to register for classes at a university.
- Completed functionality for admitted students to register, courses to have wait lists and enrollment caps. Applied Object-Oriented Programming methodologies and tested using Jenkins.

#### **Requirement Management Software**

- Built a requirement management system in Java that maximized developers ability to keep track of large requirements. Helping engineers determine priorities and decide which features should be implemented.
- Coded the functionality for the user to submit, assign, and track progress
  of each requirement to make sure all tasks can be completed in a timely
  manner.

## **Database Management Systems**

- Collaborated in a group of 4 to design and construct a database system for WolfWR, a WolfCity wholesale-store chain.
- There will be many different operations that the database will maintain such as process information, maintain inventory, billing, and transaction records.

## **GENERAL SKILLS**

Problem Solving Communication Organization Work Ethic

Adaptability Multitasking Self-Motivation