Dong Chen

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PROFESSIONAL PROFILE AND OBJECTIVE

Motivated and driven software engineer is seeking opportunities to obtain experience and competencies through research in the areas of machine learning and data analytics. An experienced agile professional with depth of knowledge in the software development, engineering, mobile development, and object-oriented programming.

EDUCATION

- **McMaster University, College of Engineering**   Hamilton, ON, Canada
  Master of Engineering in Software Engineering   *Jan 2021 – Present*

- **Boston University, College of Engineering**   Boston, MA, USA
  *Master of Engineering in Systems Engineering - GPA:**3.35**/4.00*   *Graduation Date: May 2016*

- **University of Iowa, College of Engineering**   Iowa City, IA, USA
  Bachelor of Science in Industrial Engineering - GPA:3.23/4.00   *Graduation Date: May 2014*

WORK EXPERIENCE

- ***Software Engineer*** *with CentralSquare Technologies, Sioux Fall, SD, USA*   *Oct 2018 – Oct 2019*
  - Designing, implementing and testing public safety software system - Suite Pro, includes code optimization, bug fixing, and enriching features.
  - Working in an agile environment and providing recommendations for continuous improvement.
  - Gradually building new features into complex software system based on software engineering principles, includes maintainability, anticipated changes, and usability.

- ***Software Developer*** *with B2BGateway.Net, Hope Valley, RI, USA*   *Aug 2016 – Sep 2018*
  - Collaborating with multiple teams to publish online warehouse management tools for documents processing by integrating ASP.Net, MVC, JavaScript, Ajax, and jQuery.
  - Designing aesthetic, maintainable and mobile-friendly web pages by implementing Bootstrap and AngularJS.
  - Publishing an online parking reservation application in US app stores.

ENGINEERING PROJECT EXPERIENCE

- ***Family of Greedy Algorithms***   *Jan 2021 – Present*
  - Capturing the knowledge of a greedy algorithm and defining problems in Software Requirement Specification.
  - Generating software artifacts of the family of Greedy Algorithms to solving problems, such as The Traveling Salesman Problem, in the graph environment.

- ***Graph Theory Network Architecture Design***   *Jan 2016 – May 2016*
  - Developing a geographical mapping application that applies the Dijkstra algorithm and Yen algorithm to find the shortest path along with the next top three alternative shortest paths.
  - Optimizing app's performance and determining extreme cases, such as a dead end can crash the app.

- ***Machine Learning Practice*** *– Decision Tree, Boosted Decision Tree, Random Forest*   *Jan 2016 – May 2016*
  - Designing three different models from a basic level to an advanced level, continually observing difference between perdition accuracy, and providing further solutions to improve each model.
  - Predicting wine quality and reaching 70% accuracy in over 100,000 wine quality data by using Random Forest.
  - Implementing Random Forest and Boosted Decision Tree, and using cross validation to select the best minimum observation per leaf and desired number of generated trees.

SCHOLARSHIPS AND VOLUNTEER

University of Iowa National Scholar Award   *Aug 2010 – May 2014*

Alpha Pi Mu Industrial Engineering Honor Society – Award Coordinator   *Jan 2012 – Jan 2014*

FTC Iowa Technology Championship – Volunteer Manager   *FEB 2012*