Mihai Dan

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EDUCATION

Oregon State University Corvallis, Oregon
Master of Science in Computer Science September 2017 - June 2019
with a focus on Programming Languages
GPA: 3.92

Oregon State University Corvallis, Oregon
Bachelor of Science in Computer Science September 2013 - June 2017
Minor: Business Entrepreneurship
GPA: 3.60

TECHNICAL SKILLS

Python, Haskell, C, C++, SQL, Git, HTML/CSS, Clojure, LaTeX, Agile Development

LANGUAGE SKILLS

English - Fluent
Romanian - Fluent

PAST EXPERIENCE

Oregon State University Corvallis, OR
Graduate Research Assistant September 2017 - June 2019
Responsibilities include but not limited to

- Manage and delegate responsibilities amongst a team of undergraduate researchers
- Facilitate creative solutions to various problems and unforeseen roadblocks
- Work closely with my advisor to further and improve on projects related to programming languages

Synkwise Vancouver, WA
Engineering Adviser June 2017 - present
Responsibilities include but not limited to

- Provide technical advice on furthering the development of the application
- Perform code reviews to assess the state of the application at several phases of development
- Attend conferences and meetings to promote and discuss upcoming features of the web application

PROJECTS

Thesis: *Spreadsheet Explanation Through Table Abstraction*
Describe the concept of explanation sheets, which are themselves a type of spreadsheets, but abstract from the low-level calculation and provide an overview of the computational structure.

- Created and detailed an augmented view of spreadsheets to ease understanding and maintenance
- Conducted user studies and artifact evaluations to determine the extent to which explanations are useful
- Laid the groundwork for automation of creating explanations through inference rules

Stock Market Share Price Prediction
Quantop is a share price prediction model using Deep Neural Networks.

- Implemented a Long Short-Term Memory algorithm using sliding windows to create predictions
- Created ETL processes for model training and testing

Research Paper Reference Engine
PaperGene is a reference engine which uses graph databases and visualization software to create a network of papers based on related works and provide the most relevant results based on user input.

- Employed Agile and Scrum techniques with two-week sprints to organize the workflow
- Stored and organized data in relational and graph databases for ease of entity relationship maintenance
- Managed backend functionality and created API endpoints

Medical Provider Credibility Evaluation Software
Prediction software created to assist professionals in spotting scam websites which could potentially harm patients.

- Manually collected and classified training data used for machine learning implementation
- Applied various feature engineering techniques to maximize model performance
- Implemented and compared several algorithms to optimize results

Blackjack Web Application
Web-based application which allows one or more players to play Blackjack.

- Collaborated with peers using the MVC framework and git version control
- Designed and produced a web-based application, implementing inheritance techniques for added features
- Provided design explanation, progress reports, and other necessary information to the client

PUBLICATIONS

Jàcome Cunha, Mihai Dan, Martin Erwig, Danila Fedorin, and Alex Grejuc. Explaining spreadsheets with spreadsheets (short paper). *In Proceedings of the 17th ACM SIGPLAN International Conference on Generative Programming: Concepts and Experiences*, GPCE 2018, New York, NY, USA, 2018. ACM