# ANDREI-MIHAI NICOLAE

#### **EMPLOYMENT**

# **Software Developer Intern**

King

June 2017 - Present

- Working in the Gifting team as a full-stack developer.
- Programming languages and technologies used are Java, SQL, AngularJS + TypeScript, Docker, Jenkins, Mockito.

# **Junior Software Developer**

**Avarix** 

January - April 2017

- Added features, solved bugs and maintained various financial trading platforms.
- Programming languages and technologies used were Scala, Akka, ConductR, ScalaTest, SQL.

## **Computer Science Demonstrator**

**University of Glasgow** 

**September 2016 - May 2017** 

- Explaining and aiding Computer Science basics and principles teaching to first year students as part of the Computer Science CS1PX and CS1CT courses.
- Programming languages used are Python and Alice.

## **Software Developer Intern**

King

June - September 2016

- Worked in the Gifting team that developed and maintained the whole flow through which the team could send gifts concurrently to up to tens of millions of King games players throughout the world.
- Created a very large number of features that satisfied all usability and quality assurance tests, as well as solved a significant number of both critical bugs that were in the active sprints or less major ones situated in the backlog.
- Have been involved in all stages of software development: requirements gathering, documentation, design, implementation, testing and feedback.
- Worked on both frontend and backend sides of the project, using technologies such as Java (JSON-RPC environment), SQL, Docker, Mockito, AngularJS, TypeScript.

## **Summer Technology Analyst**

**Morgan Stanley** 

June – August 2015

- Worked on the Exception Management System, implementing the main component which parsed the message, cached necessary fields and ran checks to ensure data quality and completion, raising and storing exceptions where necessary.
- Created features for message communication between the UI and Middleware and synchronization among all tiers.
- Enhanced the DB with Stored Procedures and UDFs, improving stability and efficiency.
- Have been involved in all the Software Development lifecycle phases: requirements gathering and analysis, design, implementation, testing and feedback.
- Programming languages and technologies used were Java (Spring environment), C, C++, SQL and SOAP.

## **Software Developer**

# **Google Summer of Code**

May - August 2014

- Updated the CRAM code developed for the PR2 robot so the user can visualize the state belief of the robot and the surrounding environment using Rviz instead of OpenGL.
- Created C++ libraries to provide functionalities for the robot, such as computing distance to objects nearby or visualize different possible routes for accomplishing a goals and decide which one would be optimal.
- Programming languages used were Lisp, C++, Prolog.

# **Research Software Developer**

# German National Institute of Robotics

October 2013 - April 2014

- Main tasks involved image processing, arm manipulation and object grasping.
- Developed algorithms to enhance robot movements and detect objects in highly cluttered environments (my choices have improved the time efficiency with 50-60%).
- Programming languages used were C, C++ and Java.

#### **EDUCATION**

Glasgow, UK University of Glasgow September 2014 – Present

• M.Sc. in Software Engineering.

• Grade: First (expected).

Bremen, Germany Jacobs University Bremen September 2013 – June 2014

• B.Sc. in Computer Science.

• Grade: 70% (obtained).

## **PROJECTS**

- **SyncTube** (2017 Present). Building a user-friendly web application to synchronize the user's YouTube videos and download all newly added songs to the local filesystem in a fast manner. Using Go and React.
- Algorithm Animator (2016 2017). Built as part of the fourth year university individual project a graph-algorithms animator that will aid students in understanding better different algorithm implementations (e.g., Huffman Tree, Dijkstra). Used Electron, Mocha, NodeJS, Vis.js.
- Data Extraction Tool (2015 2016). Built as part of the third year university group project a data extraction tool
  that is able to get any form of data (i.e., tables, images, text) from PDFs or Word documents. Used Java (Spring),
  Maven, Mockito, SonarQube, Jenkins.
- BusPal (2016). Built as part of a group project the backend of an application which would help people living in Glasgow to easily pay and schedule bus rides through a mobile app – this would use a QR-code system. Used Meteor.
- Web Applications (2012-Present). Created multiple web applications including a web platform for collaboration among programmers and websites for medium-sized companies, as well as for 2 TEDx events. Used Django, Python, (X)HTML, CSS, Bootstrap, JavaScript.

#### **LANGUAGES AND TECHNOLOGIES**

- Java; Go; SQL; C; Scala; Python; JavaScript/TypeScript; NodeJS; JQuery; Haskell;
- Spring; SOAP; REST; JSON-RPC; Django; AngularJS; Docker; Jenkins; CircleCI; TravisCI; Gradle; Maven; Electron; Akka; ScalaTest; SBT; MacOS; Linux;