# NICHOLAS MANGRACINA

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Recently graduated developer primarily specializing in java software development and web development, with a background in finance and music education

# **EXPERIENCE/WORK HISTORY**

**2011 - CURRENT** 

## **DRUM INSTRUCTOR, SELF-EMPLOYED**

- Lessons for beginner to advanced level drummers on drumset and marching snare drum.
- 12+ years of experience, drumset player for plays and jazz band at Manalapan high school as well as drumline section leader for Manalapan and Rutgers marching bands.

6/2016 - 8/2016

## **CAMP COUNSELOR, COUNTY ROADS DAY CAMP**

• Responsible for supervising and constantly interacting with children ages 7-12.

6/2017 - 8/2017

# ANDROID ENGINEER, INTERN, ADVENT FINTECH LLC

- Helped develop and launch website for startup.
- Worked in team of 2 to develop TradeTracker app for android. (more details in projects)
- Optimized algorithms to consume least battery life possible.

### **EDUCATION**

09/2014 - 1/2018

## B.S. COMPUTER SCIENCE, RUTGERS UNIVERSITY - NEW BRUNSWICK

- In-major GPA: 3.27
- Relevant courses: object-oriented programming, data structures, databases, design and analysis
  of algorithms, systems programming, computer architecture, internet technology, artificial
  intelligence and machine learning, cryptography.
- Extracurriculars: Marching band, USACS member (Computer science club), Rutgers Esports, HackRU volunteer, marching band, drumset for basketball games.

# **SKILLS**

- Proficient: Java (Android, JDBC, concurrency, JSP, JavaFx) C/C++, Python, SQL, MS office
- Prior experience: Html5, CSS, JavaScript(react.js, node.js), C#, Unix, NoSQL, XML, ASP.NET
- Strong collaboration skills. Bitbucket + Github
- Leadership experience as marching band section leader
- Strong at algorithm design and optimization
- Advanced knowledge of data structures and object-oriented design

<sup>\*</sup>Next page contains some notable projects

## **PROJECTS**

#### **TRADETRACKER** – ANDROID APP

- Includes all cryptocurrencies and stocks, push notifications for price or volume targets met.
- Sends customizable alerts from movements in prices, volume, and other technical indicators.
- Monitors movement in volume or price according to user's parameters (e.g. notify if up 2% in a 5-minute timespan, down 10% in a week, volume triples in 20-minute period, etc)
- Momentum notifications based on RSI and other stochastic indicators.
- Java/Kotlin, anko, jsoup, junit, SQLlite, yahoo finance API, cryptocompare API.

#### **RUTGERS RIDESHARING WEBAPP** – RUTGERS PROJECT

- Carpool scheduling for students with similar schedules.
- JSP, JDBC, hosting on amazon web server, uses mySQL database, used Apache tomcat server for test hosting.

# BANKING SYSTEM (CLIENT AND SERVER) - RUTGERS PROJECT

- Multi-threaded, as well as multi-processed version made for extra credit.
- Written in C, utilized network sockets, pthread libraries, POSIX shared memory.

#### HANDWRITING CLASSIFICATION WITH NEURAL NETWORKS - RUTGERS PROJECT

- Supervised learning from sample data of drawn number.
- Utilizes neural networks to run tests on training data to learn what written numbers look like from pixel analysis, then runs test data to see accuracy and learn over numerous iterations.
- Written in python, everything hard-coded from scratch.

#### JOB-BOMB - PERSONAL PROJECT

- Logs into your Snagajob account and loads all '1-click apply' jobs onto a GUI within a user-specified mile radius (approx. 1 in 15 of jobs on here are '1-click apply)
- Jobs are shown in checklist, user can choose which to check or uncheck, applies to all checked
- Option to filter or ignore by keyword or phrase (e.g. 'manager', 'shift supervisor')
- Only available for Snagajob (all 1-click apply on Snagajob are low-skill jobs, so user can't bother places that they might not be qualified for)
- Written in Java, utilized JavaFx, javaMail, and Selenium.

Full list of all projects with source code and digital copy of resume can be found at <a href="http://nickmangracina.me">http://nickmangracina.me</a>.