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#### **Education**

## **Duke University - Pratt School of Engineering - Durham, NC**

Exp. Graduation: May, 2018

BSE Electrical and Computer Engineering/BS Computer Science

- Courses: Software Design and Implementation, Signals and Systems, Computational Methods in Engineering, Data Structures and Algorithms, Multivariable Calculus, Linear Algebra, Probability, Differential Equations
- GPA: 4.00/4.00
- Dean's List with Distinction (Fall 2014, Spring 2015, Fall 2015, Spring 2016)
- Minor: BS Mathematics

## La Salle Academy – Providence, RI (4.00/4.00)

2010-2014

• Honors and Awards: Salutatorian (*Rank: 2/340*), AP Scholar with Distinction (2014), Principal's Award (2014), Wendy's Heisman State Finalist (2014), Harvard Book Award (2013)

# **Work Experience**

# InterSystems | Systems Development Intern - Cambridge, MA

Summer 2016

- Built a data science tool, following the Deep Feature Synthesis algorithm, which automates the creation of predictive models from relational databases using Caché ObjectScript (M).
- Used Scala and Spark to design a machine learning pipeline.
- Authored a white paper focusing on the integration of SQL standard into InterSystems specific technologies.

# **Duke University** | Peer Tutor CS201 - Durham, NC

Aug 2015-May 2016

• Tutored one student on the concepts of Data Structures and Algorithms for two hours per week.

# Nowell Academy | Tutor - Central Falls, RI

June 2015- Aug 2015

• Tutored at-risk students in the subjects of algebra II and personal finance.

## **Design Projects**

### **Storkd** | Mobile Application

2016-present

- Full-stack development, in a team of 3, of an e-commerce app that connects local artist to travelers.
- Use of React Native for cross-platform compatibility.

## VoogaSalad | 2D Sprite Gaming Environment

2016

- Designed, in a team of 8, a game authorship environment and game engine, built to support an unlimited number of games encompassing multiple genres.
- Utilized XStream to serialize games into XML format for easy saving and sharing.
- Integrated Facebook social media features.

#### **SLogo** | Training Language IDE

2016

- Built a real-eval-print loop IDE, designed as an educational tool.
- Designed and implemented a parser and AST for SLogo (simplified Logo) code.
- Features: multiple workspaces, saved visual preferences, command caching, & line-by-line debugging.

#### **Cell Society** | Cellular Automata

2015

• Designed and implemented a tool that allows users to run several cell-based simulation models.

# **Integrated Design Challenge**

2015

- Designed four Arduino robots, in a team of 8, in a cost effective manner using fundamental electronic devices (QTI sensors, Xbee module, PIR sensor, etc.).
- Robot functionality: line, light, color, location, & motion detection and external communication.

#### **Technical Skills**

Language Depth: Java, MATLAB

Languages Breadth: C, C++, Scala, SQL, JavaScript, Caché Object Script (M)

Skills & Frameworks: React Native, Spark, Arduino, CSS, LaTeX, XStream

#### Leadership and Involvement

**Duke Club Soccer** | Vice President