# IAN STEENSTRA

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#### **EDUCATION**

### **RENSSELAER POLYTECHNIC INSTITUTE, Troy, NY**

Graduated May 2020

Bachelor of Science in Computer & Systems Engineering w/ Concentration in Artificial Intelligence and Data

### **WORK EXPERIENCE & RESEARCH**

WAYFAIR, Boston, MA

# Software Engineer

October 2020 - Present

- Working as a collaborative team member on the Notifications Content & Delivery Team that owns the infrastructure which powers Wayfair's billions of email, push and sms notifications
- Designing and implementing distributed systems that utilize Wayfair's vast customer real-time and historical data to curate personalized notifications through the use of Kafka, Storm, Akka, Aerospike and PowerMTA

## **Software Engineer Intern**

June 2019 - August 2019

 Created an automated bandit testing tool using Jenkins, React.js and PHP; which, can generate over \$300,000 in additional revenue in one day by strategically marketing emails to Wayfair's millions of customers through a Java application I developed

**UPWORK,** Boston, MA July 2020 – October 2020

#### Freelance Software Engineer - Machine Learning

- Developed an MVP app for a brand label recognizer, so that a brand's image may act as a QR code to link to their website
- Trained and used an autoregressive integrated moving average model to predict stock futures using data from Google BigQuery

# RENSSELAER POLYTECHNIC INSTITUTE, CISL & IBM, Troy, NY

January 2019 - May 2020

## **Undergraduate Researcher**

- Created a visual question-answering system that uses the Visual Genome dataset and scene graphs for providing cross-task attention learning with weak supervision
- Developed a multimodal open-domain question-answering system for the Dialog State Tracking Challenge, using BiGRUs, multimodal fusion, attention, teacher forcing and a new data augmentation technique

## **PROJECTS & PUBLICATIONS**

PeerSupport – Startup Business & Rensselaer Center for Open Source Project

August 2019 - October 2020

- Project Manager for a team of 10 computer science students creating an anonymous peer-support web application using React.js, Django REST Framework, PostgreSQL, Redis, Kubernetes, Docker and Natural Language Processing
- Automatically classifies harmful messages (ex: suicidal ideations & threats) for anonymous evaluation by on-call counselors
- Winner of the Spring 2020 RPI Change the World Challenge receiving a \$1000 cash prize

#### SAFEWHEEL - Intro to Engineering Design Project

Fall 2018

- Lead a team in creating a working prototype of a steering wheel cover that sounds an alarm when the driver's hands are off the wheel or their eyes are closed (utilized App Engine, Cloud Storage and AutoML Vision from the Google Cloud Platform)
- Appeared on Google's internal newsletter

# $\textbf{Multimodal Dialogue State Tracking By QA Approach with Data Augmentation} - \texttt{RPI} \ \& \ \texttt{IBM}$

Spring 2020

- Published by the Association for the Advancement of Artificial Intelligence (AAAI) and postered at AAAI-20

### Evolution of Activities in a Smart Grid Summer Camp for High School STEM Students (Evaluation) - RPI & CURENT

Fall 2019

- Published by the American Society of Engineering Education (ASEE) and postered at CURENT in UT Knoxville

### **SKILLS**

LANGUAGES: Java, Python, PHP, React.js, HTML, Microsoft SQL Server

**SOFTWARE:** Git, Kubernetes, Docker, Apache Kafka, Apache Storm, Akka, InfluxDB, Elasticsearch, Kibana, Jupyter Notebook, Google Cloud Platform, Google BigQuery, Google Colab, Grafana, Aerospike, Django, Jenkins, Google Suite, Microsoft Office, PyTorch, Keras

#### **LEADERSHIP & HONOR SOCIETIES**

**RPI ENGINEERING AMBASSADORS – Outreach Coordinator** 

HACKRPI 2019 – President, Director of Logistics and Master of Ceremonies

Reestablished RPI's annual hackathon and helped secure over \$20,000 in sponsorship

SIGMA ALPHA EPSILON – Technology Chairman & Community Relations Chairman

Fall 2018

PHALANX & ORDER OF OMEGA HONOR SOCIETY – Member

Spring 2019 - May 2020

Fall 2018 - Spring 2019 Fall 2018 - Fall 2019