

# RAY BLANDFORD

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## EDUCATION

### Virginia Tech

Dec 2017

BS in Business IT | GPA: 3.4

Computer Science + International Business Minors

### Semester at Sea

Jan 2016 - Apr 2016

### Education Abroad Program

Traveled to 11 countries throughout Asia, Africa, and Europe to gain perspective on culture and International Business.

## EXPERIENCE

### Microsoft

Redmond, WA

April 2018 - present

### Technical Program Manager

- Implemented plan to reduce resource overhead via increased automation of privacy controls by 52% in 2 quarters.
- Engineered data pipeline to reduce dashboard refresh from 2 weeks to seconds.
- Converted security access FAQ to Azure Bot prototype for decreasing inappropriate access requests using natural language understanding.
- Designed intelligent training system using conversational AI and personalized learning paths with a hybrid recommender algorithm in Azure ML.
- Launched collaborative learning group for university hires to deepen knowledge in Artificial Intelligence and Machine Learning.

### Appian

Reston, VA

May 2017 - Aug 2017

### Software Engineering Intern, Mobile

- Reengineered native mobile app in React Native to increase average feature velocity from a month to under a week.
- Increased test readability and efficiency using Jest snapshots.
- Contributed to Facebook's React Native open source project.

### Appian

Reston, VA

May 2016 - Aug 2016

### Software Engineering Intern, Android

- Triggered push notification based on JSON response using Android's AsyncTask and NotificationCompat libraries, with support for internationalization.
- Improved end-user adoption rate by automating enterprise upgrades.

### Visa

Foster City, CA

May 2015 - Aug 2015

### Technology Business Management Intern

- Develop Tableau visualizations for executive team that resulted in reduction of wasted resource time by 80%.

## PROJECTS

Jul 2018

### Microsoft Hackathon Winner, AI for Earth: Plastic Free Oceans

- Developed system to monitor plastic flowing from river systems into the ocean - architected with cost, scalability and portability in mind.
- Optimized PyTorch Faster-RCNN object detection model to tag plastics, output to Azure Blob, then passed to Power BI for visualization.

Dec 2017

### STEM Education for Underrepresented Youth using Mobile AR

- Engineered Augmented Reality Android game to improve standardized math scores of elementary students in Title I schools.
- Built state machine and configured build variants for key design scenarios.

Jul 2017

### Snapchat Clone

- Implemented React Native bridged component for Google Mobile Vision.
- Granted camera access to detect and track faces and emotion.

Jul 2017

### Appian Intern Hackathon 2nd Place

- Developed React + React Native component for sentiment analysis using Stanford's Core Natural Language Processing (NLP) and Aylien libraries.

Mar 2017

### Google VR Challenge Winner: Mind Palace (Play Store) (Github)

- Created 3D, Virtual Reality Photo Viewing experience for Android with Unity.
- Built custom plugin to get permission for and access most recent gallery photos.
- Designed intuitive animation to prevent VR motion sickness.

Jul 2016

### Appian Intern Hackathon Winner

- Developed diffing algorithm for Appian's Process Modeller tool.
- Presented demo and voted best by Engineering group and C-Suite.

## SKILLS

Web/Mobile

Data

Android, Java, React Native, React, ES6, JavaScript, PHP, Unity, C#, HTML, CSS

Python, NLTK, SQL, Kusto, Power BI, Tableau, XML