


# JOSHUA FORD | Curriculum Vitae

Senior AI/ML Software Engineer, Apple – Seattle, WA USA

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## Profile

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Experienced software engineer who has designed, implemented, and deployed several systems with a focus on machine learning and human-computer interaction. Proven leader guiding cross-functional efforts to develop compelling user experiences.

## Education

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2014 - 2016

### **Bachelors of Science, Computer Engineering**

University of Minnesota | Minneapolis, MN USA

- *Advisors:* Dr. Brent Hecht, Dr. Eytan Adar
- *Thesis:* Automated Generation of Visualizations from Unstructured Text

2012 - 2014

### **Post-Secondary Enrollment Options**

University of Minnesota | Minneapolis, MN USA

- Program for Minnesota high school students to take classes at the University of Minnesota for both high school and college credit

2010 - 2014

### **High School**

Lakeville South High School | Lakeville, MN USA

2009 - 2014

### **University of Minnesota Talented Youth Mathematics Program**

University of Minnesota | Minneapolis, MN USA

- Accelerated program for students who are highly talented in mathematics

## Academic Experience

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2014 - 2016

### **Undergraduate Research Fellow**

University of Minnesota | Minneapolis, MN USA

- *Atlastify*: Exploratory visualization for viewing semantic relatedness on a wide array of maps
- *VizByWiki*: System for automatically generating visualizations from news article text

2014

### **Project Tango Visualization Project**

University of Minnesota | Minneapolis, MN USA

- Novel point cloud interactive visualization system developed in collaboration with a research lab to facilitate with Google's Project Tango

## Professional Experience

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2019 - Present

### **Senior AI/ML Software Engineer**

Apple Inc | Seattle, WA USA

- Designed and contributed to the automatic hand washing detection feature in watchOS 7
- Developed on a number of sensing research projects

2016 - 2019

### **watchOS Software Engineer**

Apple Inc | Cupertino, CA USA

- One of the primary architects and developers for the Siri Watch Face
- Crafted 3<sup>rd</sup> party API for external developers
- Integrated and evangelized personalization using on device machine learning into several projects

2015

### **Software Development Internship**

Epic Systems | Verona, WI USA

- Lead effort to build a 3D visualization and documentation iPad application for dermatologists

2014

### **FGPA Development Internship**

Seagate Technology | Shakopee, MN USA

- Developed flash memory controller for a hard disk drive

## Publications

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### Refereed Conference Papers

- [C. 1] Lin, A.Y., **Ford, J.**, Adar, E., and Hecht, B. VizByWiki: Mining Data Visualizations from the Web to Enrich News Articles. Proceedings of the 27th World Wide Web Conference (WWW 2018). 2018.

### Invited Presentations

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- [T. 2] **World Wide Developer Conference 2018 (Apple Inc)**  
Salzman, P., **Ford, J.**: Siri Shortcuts on the Siri Watch Face. San Jose, CA USA. June 6, 2018.
- [T. 1] **The Social Media and Business Analytics Collaborative (SOBACO) Spring Research Symposium**  
Li, T., **Ford, J.**, Hecht, B.: Atlasify: The Geography of Everything. Minneapolis, MN USA. May 14, 2015.

## Intellectual Property

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### Patents

- [P. 5] **Joshua R. FORD**, Bianca Marcial OCASIO, Wajeeh Syed, Michael C. Landers, Sunny R. Sainani. User simulation for model initialization. US20200042147A1. August 3, 2018. Pending.
- [P. 4] Joao Pedro DE ALMEIDA FORJAZ DE LACERDA, Giovanni M. Agnoli, Bob Bradley, **Joshua R. FORD**, Michael D. Ford, Brian E. Korver, Marc J. Krochmal, Joseph E. Meyer, Jared K. McGann, Rex C. Ross, Paul W. Salzman, Christopher G. Skogen. Data synchronization across multiple devices. US20190373058A1. June 3, 2018. Pending.
- [P. 3] Giovanni M. Agnoli, Matthew J. Sundstrom, Conrad B. KRAMER, Kyle T. Howarth, William C. MacCartney, **Joshua R. FORD**, Paul W. Salzman, Ari R. WEINSTEIN, Roozbeh Mahdavian, Joshua C. Weinberg, Jared K. McGann. Determining relevant information based on third party information and user interactions. US20190370029A1. June 3, 2018. Pending.
- [P. 2] Giovanni M. Agnoli, Joshua C. Weinberg, **Joshua R. FORD**, Antoine J. Atallah, Roozbeh Mahdavian, Eric Lance Wilson. Determining relevant information based on user interactions. US20180336284A1. US20180336284A1. Pending.

- [P. 1] Heena Ko, Giovanni M. Agnoli, Kevin Will Chen, **Joshua R. FORD**, Chrisopher Patrick FOSS, Aurelio GUZMAN, Stephen O. Lemay, Matthew J. Sundstrom, Joshua Weinberg, Christopher Wilson. Context-specific user interfaces. US20180329587A1. May 12, 2017. Pending.