

# Christopher Fox

(360) 609-5854  
chrisdavidfox@gmail.com  
cdfox.github.io

## Experience

- May 2015 **Software Engineering Intern**, *Google*, New York, NY.
- Aug 2015
    - Natural language understanding for Google Now, Google’s virtual assistant.
    - Used Python and C++ to prototype and evaluate an improvement to the system.
- Aug 2014 **Research Assistant**, *North Carolina State University*, Raleigh, NC.
- May 2015
    - Built Wizard-of-Oz data collection interface for spoken dialogue system development using the Unity platform and C#.
- May 2014 **Software Engineering Intern**, *Google*, New York, NY.
- Aug 2014
    - Prototyped an improvement to a tool for Adwords customers using a distributed computing framework in C++.
    - Built a web-based demo with Python, Javascript, HTML, CSS.
- May 2013 **Software Engineering Intern**, *Apple*, Cupertino, CA.
- Aug 2013
    - Researched, implemented, and tested a load balancing algorithm for the Game Center backend in Java.
    - Built a web-based visualization to show estimated improvement under the new system.
- Jan 2012 **Research Assistant**, *North Carolina State University*, Raleigh, NC.
- May 2013
    - Modified Latent Dirichlet Allocation, a probabilistic model of latent thematic structure in a text corpus, to learn topics with both static and time-varying aspects.
    - Used Gibbs sampling to fit a model to the corpus of 32K tech news articles gathered using the Twitter API.
    - Documented the model and the results in my master’s thesis ([figure showing time-specific words for a “legal” topic](#)).
- Sept 2009 **Research Assistant**, *University of Washington*, Seattle, WA.
- June 2010
    - Built an HTML Canvas-based player to display dynamically generated animations of flow cytometry data.
    - Used Python to produce a KML visualization in Google Earth from flow cytometry data.

## Education

- 2013-2015 **PhD Computer Science**, *North Carolina State University*, Raleigh, NC.  
Not completed.
- 2012 **MS Computer Science**, *North Carolina State University*, Raleigh, NC.
- 2009 **BS Mathematics, BS Economics**, *University of Washington*, Seattle, WA.

## Projects

- **Route Teaching Game** Led the development of a web-based game ([screenshot](#)) where one user teaches another to draw a route, using Firebase and Google Maps API.
- **Walk Your City iOS App** Built a Google App Engine backend supporting geospatial queries for an iOS app, for a group project in a class ([video](#)).
- **SouffléTutor**. Built a voice-controlled guide on iOS for making a soufflé, using the Nuance speech API, Pocketsphinx, and a naive Bayes classifier ([video](#)).
- **Twitter LSI** Built a Python web app using the LSI implementation in Gensim to plot Twitter search results in two dimensions, so that similar tweets cluster visually ([screenshot](#)).