

# Alice Wong

## Sr Data Scientist - Gameloft

Cambridge, MA - Email me on Indeed: [indeed.com/r/Alice-Wong/05ba5f6cb6cbea4f](https://www.indeed.com/r/Alice-Wong/05ba5f6cb6cbea4f)

A data scientist with six years of experience with strong technical, business strategy and communication skills looking for a stable environment where values upheld at the time of hiring are passed on through organizational changes in recognition of contributions unto the company as a whole and not any specific potentially transient hiring managers or employees.

Willing to relocate to: New York, NY - Chicago, IL - San Francisco, CA

Sponsorship required to work in the US

### WORK EXPERIENCE

#### Sr Data Scientist

Gameloft - Boston, MA - February 2017 to Present

- Prototyped a RandomForest model for paying user detection put into production.
- Predicted cohort cumulative lifetime value for DMLegends using the first 3 days' data with an 18% percentage error.
- Predicted short-term revenue growth and purchases with zero-inflated longitudinal mixed effects models.
- Served as a team lead across various projects by providing recommendations on optimizing models, metrics for evaluating models, best practices for production and data to collect.

#### Data Scientist

Houghton Mifflin Harcourt - Boston, MA - May 2015 to October 2016

Writing algorithms to predict performance for students over time using longitudinal mixed effects models and identifying students at risk of poor performance for adaptive educational software.

- Predicted IT issues using natural language processing, dynamic Bayesian networks and zero-inflated longitudinal mixed effects models.
- Predicted retention of student usage of educational software and other products over time using both regression and machine learning methodologies such as support vector machines, gradient-boosted trees, k-nearest-neighbors, sequential nearest neighbors, naive Bayes classifiers, RandomForest and survival analysis.
- Created prototypes of algorithm-driven products such as a literary appreciation/creative writing app centered on natural language processing and an algorithmic walking schoolbus centered on minimum spanning trees and geographic information systems.

- Performed various ad hoc analyses displayed on an interactive dashboard to track, for example, platform issue ticket causes, the effects of repeated effort on student performance, the impact of completing conceptual prerequisites.
- Served as a company-wide bridge across various departments to make infrastructure decisions, improve e-commerce outcomes and explore synergies between different textbooks' instructional methods.
- Provided business development recommendations to HMH Marketplace and Labs.
- Led two interns in their work on interactive dashboards and app prototypes.

## **Data Scientist**

Localitys - Boston, MA - July 2014 to April 2015

Developed retention, engagement and cumulative lifetime value predictive algorithms for (micro-)segmentation, personalization and remarketing using methodologies such as naive Bayes (text) classifiers, market basket analysis, support vector machines, randomForests, k-nearest neighbors and sequential k-nearest neighbors, logistic regression and survival analysis.

- Detected event funnels leading to conversion events using various data mining techniques such as graph algorithms.
- Assisted in creating an online dashboard for non-technical teams to obtain metrics in real time.

## **Senior Analyst**

Constant Contact - Waltham, MA - November 2013 to July 2014

Using high-dimensional algorithms, predicted churn above 50 times the random rate of predicting churn while keeping the false positive rate below random.

- Using email features such as subject categories, content, delivery time, images and structural features to predict open and click rates primarily through text classification algorithms.
- Evaluated cross-selling success for Constant Contact and SinglePlatform products through longitudinal mixed models of clients' menu (on Yelp, etc.) views.
- Product strategy: a customized app tool to display a client's menu view forecasts over time.

## **Senior Analyst**

comScore - Reston, VA - August 2012 to October 2013

Using R, SQL and SAS to predict the demographic profiles of web visitors from various large, nationwide data sets or specific clients' data sets using mostly app events data and various high-dimensional methodologies with an emphasis on naïve Bayes text classification methodologies and k-nearest neighbors.

- Increased the lift over the pre-existing model by 0.30 and reduced the dependence of model performance on measurement precision in web visitation.
- Developed algorithms such as graph algorithms for the optimal clustering of cookies into likely web user profiles.
- Provided ad hoc support such as parsing search queries and A/B testing.

### **Statistics Intern**

New England Research Institutes - Watertown, MA - June 2011 to September 2011

Analyzed and managed limited access public-use data for NIH by merging large datasets from Thalassemia Cohort Research Network, producing frequency tables, removing outliers, randomly generating identification numbers and performing complex date conversions in SAS.

- Wrote codebooks and searched databases using SQL to obtain relevant information.
- Completed tasks one or two months ahead of schedule.

### **EDUCATION**

#### **M.S. in Biostatistics in Biostatistics**

Harvard University

May 2012

#### **B.A. in Economics cum laude in Postbaccalaureate Graduate Studies**

University of Pennsylvania

December 2009

### **SKILLS**

HTML (Less than 1 year), MySQL (Less than 1 year), SAS (1 year), Serial Attached SCSI (1 year), SQL (1 year)

### **ADDITIONAL INFORMATION**

#### **Skills**

R, SAS, Stata, Python, SQL (Sybase, Oracle, PostGres, MySQL, Vertica), PHP, HTML, Spark, Microsoft Azure