# Puran Zhang

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#### **EXPERIENCE**

## Software Engineer Consultant - Riverside County Office of Education, CA

APR 2018 - PRESENT

- Built timesheet web components, which served over 400 schools, with AngularJs and Grails.
- Prototyped and developed information-display popup widget, which unifies UX on functional cells.
- Contributed to Angular incremental upgrade plan with componentized directives.
- Automated rule-based "payroll type" conversion in database and grails service, and directly contributed to solving the performance issue on loading timesheet with pre-calculation, which reduces runtime by 30%.

## Research Assistant - Temporal Word Embeddings, Cornell University, NY

MAY - SEPT 2017

- Quantified changes of words' meanings in politics, by fitting a *Dynamic Embeddings* model on political comments on Facebook with *TensorFlow* and Python.
- Optimized query performance, by applying aggregation on comments data in MongoDB database.

#### **EDUCATION**

Cornell University, Ithaca, NY MPS, Information Science

AUG 2016 - AUG 2017 GPA: 3.44/4.00

## University of Richmond, Richmond, VA

B.S., Mathematics & B.S., Psychology, Minor in Computer Science

AUG 2012 - MAY 2016 Cum Laude, Math GPA: 3.92/4.00

Relevant coursework: Machine Learning • Data-driven Web Applications • Computer Graphics • Natural Language Processing • Database System • Algorithms • Operations Research • Numerical Analysis • Abstract Algebra

## SCHOOL AND PERSONAL PROJECTS

BangumiN - A progressive web client for Bangumi, a IMDb-like social network.

APR 2018 - PRESENT

- Built and shipped an i18n-ready app that deeply integrates with DynamoDB and Beanstalk in AWS, and tracks user progress of shows with a peak of 1000+ daily active users.
- Built a D3.js-based data visualization toolbox of users and subjects' descriptive statistics, with Angular 7, TypeScript, ngx-chart and Node.js.

### Data Visualization, Cornell University

JAN - MAY 2017

- "Rabbling" Babies' vocabulary development
  - Implemented linear regression from wordbank with JavaScript; And designed the visuals with Sketch.
- The Century of Movies Dynamics of movies in 1916 2016
  - Massaged the IMDb data (Kaggle) and implemented the framework with JavaScript and D3.js.

## "Keep talking or explodes" - MPS Project, Sue's Lab at Cornell University

AUG - DEC 2016

- Led the team and implemented a real-time web-based messaging app with Node.js and Socket.io, which allows researchers to modify features such as "is typing" indicators.
- Designed the user interface of the messaging app with HTML5/CSS3.
- Modified the C# core code of the game *ktane*, which allows researchers to generate customized bomb for studies.

Relevant skill: Angular, JavaScript, TypeScript, Grails, Java, Python, D3.js, ETFX, git, Sketch