

# Puran Zhang

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## EXPERIENCE

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**Software Engineer Consultant** - ERP System, *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

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**Cornell University, Ithaca, NY**   AUG 2016 - AUG 2017  
MPS, Information Science   GPA: 3.44/4.00

**University of Richmond, Richmond, VA**   AUG 2012 - MAY 2016  
B.S., Mathematics & B.S., Psychology, Minor in Computer Science   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

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**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 AWS, and tracks user progress of shows with a peak of 1000+ daily active users.
- Prototyped and 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, ~~TEX~~LaTeX, git, Sketch