SEN LU TOM CHEN

San Francisco

senlutomchen.com | github.com/senluchen2015 | linkedin.com/in/senluchen/

Education

Northwestern University, Evanston, IL

Jun. 2015

Bachelor of Arts in Computer Science, minor in Economics

Cumulative GPA: 3.5/4.0

• Related Courses: Operating System, Networking, Design and Analysis of Algorithm, Artificial Intelligence, Machine Learning, Probabilistic Graphical Model, Natural Language Processing, Human Computer Interaction, Geospatial Vision and Visualization, Computation Photography, Sensor Network, Internet Security, NuVention (entrepreneurship)

Work Experience

Senior Software Engineer

Sight Machine, San Francisco, CA

May 2017 - Present

- Lead Frontend development in our manufacturing analytics platform, building features such as dashboards, data visualization, data table, custom analytics builder and alerting. (Stack: React, Redux, Flask)
- Lead Frontend development in our drag and drop ETL tool to enable Data Engineers to create data pipelines from the factory machines to our analytics system, reducing time to implement a factory.
- Designed and rebuilt a timezone enabled date picker to fix timezone related issues and provide a standard system to query and format date time throughout the application. (medium.com/sight-machine/building-a-time-zone-enabled-date-picker-3b50e2626fa3)
- Created a Javascript UI testing framework, built with Chrome Puppeteer to enable QA Automation Engineers to write both endto-end and integration tests, and include a CLI to control which environment to run the tests.
- Architected and implemented an application wide error handler to catch network request and Javascript errors and provide
 options to display different types of error messages as well as logging errors to the backend.
- Act as the frontend architect, mentor new engineers, manage the Webpack build and lead efforts to ensure libraries such as React and material-ui are up to date.

Software Engineer

Forio, San Francisco, CA

Aug. 2015 - May 2017

- Architect and implement educational and business web applications on React/Redux or Backbone.js for clients such as Wharton, Liberty Mutual, and Johnson & Johnson. (sample projects: senlutomchen.com)
- Lead front-end development on six projects and contribute to eleven projects total.
- Mentor new employees, delegate tasks and set front-end development standards.
- Solve interesting problems such as voice chat using WebRTC, multiplayer game matching algorithm, machine generated graph minimizing edge overlaps and contribute to internal d3 chart library, Contour.

Software Engineer Intern

Civis Analytics, Chicago, IL

Jul. 2014 - Sep. 2014

- Designed, implemented and tested a commenting system that allows users to comment and reply on any page. (Rails)
- Created an activity module that shows various types of user activities with simple methods to add new types of activities
- Recreated a database status page using AngularJS to allow user to view queries and table statuses automatically without the need of refreshing the whole page

Skills

Technical: Proficient: JavaScript, React/Redux, HTML, CSS, Backbone, d3, SQL, Linux, Webpack

Intermediate: Python, Swift, C/C++, Ruby on Rails, Node.js, AngularJS, CoffeeScript, WebRTC

Basics: Adobe Photoshop, Java, Objective C

Language: Fluency in English, Mandarin, Taiwanese

Projects

Divit - cross-platform mobile roommate expense payment system that record and settle debts (Objective C, Node)

TaipeiFood - A Local Guide: iOS app recommending Taipei's food from a local's perspective (Swift)

WikiPredict: Research project that leverage learning algorithm to predict future Wikipedia pages' view counts (Matlab, Shell Script)

Leadership Experience

Executive Board Member

IEEE, Evanston, IL

Mar. 2013 – Sep. 2014

- Plan, direct and execute educational events such as tech talks and registration advisement, acting as ambassador between the students and the EECS department
- Represent Northwestern University by attending IEEE conferences around the regions, learning about technology advancement and leadership

National Philanthropy Director Intercollegiate Taiwanese American Student Association, Evanston, IL Sep. 2011 - Sep. 2014

- Coordinate and promote annual web-based national high school scholarship competition, successfully bringing in 2.5 times more applicants than previous year
- Oversee regional directors to organize philanthropy outreaches, such as tutoring underprivileged children in communities across the country