# Xiaoyu (Claire) Yuan

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#### **OBJECTIVE**

A senior student looking for intern in Summer 2017, major in computer science.

#### **EDUCATION**

**Georgia Institute of Technology** 

08/2013 -05/2017 (expected)

Bachelor of computer science, Media and Intelligence threads

#### **EXPERIENCES**

Undergraduate Teaching Assistant with Professor James Foley

08/2016 - current

College of Computing @Georgia Tech

• Present D3 programming lectures, grade InfoViz homework and evaluate in-class projects.

# Undergraduate Research Assistant with Professor Spencer Rugaber UROC program @Georgia Tech

08/2015 - 05/2016

- Built an astronomy education website using Mathematica data library and GUI functions.
- Worked in backend by implementing Mathematica notebook and CDF player into web files.
- Designed frontend with Bootstrap.
- Enhanced user participation and instructional effects by playable web app.

#### **PROJECTS**

#### Information Visualization project for DotA2 matches data

01/2016 - 05/2016

- Created a web app with d3.js to visualize data of matches in online battle game called DotA2
- Designed and implemented the user interface of web app in HTML.
- Parsed and performed statistic over 3,000,000 data in JSON files.
- Built data visualization in tree map and scatter plot using D<sub>3</sub>.

## Scribbler robot localization project

04/2016 - 05/2016

- worked in group project designing the detection of red targets by a Scribbler robot.
- Applied particle filter algorithm for localizing the targeted objects.
- Did real time detection of objects while robot is running and applied corresponding methods in openCV library for analysis.
- In charge of process design and continuous testing.

# Frontend app and DBMS for restaurant inspection reports in Georgia

05/2015 - 08/2015

- Generated inspection reports of restaurants in Georgia according to dynamic query by the users.
- Developed front-end UI in Python.
- Designed the MySQL query allowing user to insert, view and search the restaurants and corresponding reports.

## Graphical interactive web apps project

08/2015 - 12/2015

- Designed several 2-D and 3-D Graphics web interactive applications using WebGL and typescript.
- Applied sophisticated computer graphics algorithms in ray tracing, shading, camera, subdivision, textures, etc.
- Built individual projects include designing image loading tools, personal portfolio in 3-D transforming animation and user-interactively letter-typing web apps.

#### **SKILLS**

- Programming language: Java, JavaScript, C, Python, Typescript, MATLAB, Assembly.
- DBMS language: MySQL.
- Development tools: Github, Bootstrap, openCV, webGL, Three.js, D3, WordPress.