

# Pinyi Yang

Full Stack Developer, Ph.D. in Materials Science & Engineering  
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I am a full stack developer, experienced in bringing rudimentary abstract concepts into real-life application through my problem-solving, self-study and project management skills.

## SKILLS

**Programming:** Javascript, Typescript, Python, Matlab, Java

**Web Development:** React (Hooks), Node.js, Express, GraphQL, SQL/Postgres, NoSQL/MongoDB, HTML, CSS, Django

**Others:** OAuth, JWT, Session, React Vis, React Map GL, Mapbox, Google API, Yahoo API, Heroku, Github

## PROJECTS

**Fantasy Basketball Domina** - a fantasy basketball tool providing statistical insights of teams

- Tech: Typescript, React (Hooks), OAuth, Node/Express, GraphQL and MongoDB; researched applying GraphQL to simplify data structure in frontend.

**Safe Street** - Mobile app for searching neighborhood crime, natural disasters, and air quality

- 2-day hackathon with 2 developers and 2 UX designers: Served as lead developer, planned and distributed tasks to team, communicated with designers to refine features to meet deadline.
- Tech: React, Node/Express, JWT and MongoDB; studied React Map GL to implement location track feature.

**Nutri Facts** - personal diet tracker with food suggestions and nutrient status visualization

- Planned and led project with team of 4 developers, cooperated with UX designers
- Reviewed, debugged and integrated fellow developers' code as git master; integrated code to create a functional application.
- Tech: React, Node/Express.js, JWT and MongoDB; Studied React Vis to add nutrient visualization features for users.

**MyE&T** - personal planner and task tracker with statistical summaries for time optimization

- Tech: Node.js/Express, ejs, Postgres and Session; Studied Google API to tasks statistics visualizations.

## EXPERIENCE

**Research Lead**, University of Houston, Jul. 2017 - Jan. 2019

- Project lead in wearable electronic prototype development; developed solutions to meet design specifications for innovative health monitoring and medical treatment during materials selection, designed device structure and processing.
- Developed and managed Matlab and Python scripts for data collection and analysis.
- Collaborated with Texas Medical Center Researchers to evaluate device with live animal tests.

**Test Engineer**, Aries App. Inc., Feb. 2014 - Feb. 2016

- Designed algorithm to simulate materials metamerism (color matching issue under different light) for textile and dye products.
- Collaborated with software engineer in application development, tested the simulation results.

## **EDUCATION**

General Assembly, Software Engineering Immersive	class of 2019
University of Washington, Ph.D. in Materials Science and Engineering	class of 2013
Sichuan University, Bachelors (B.S.) in Materials Physics	class of 2008