

# Pinyi Yang

Full Stack Developer, Ph.D. in Materials Science & Engineering  
github.com/shadownova65 | linkedin.com/in/pinyi-yang | shadownova.tech  
Seattle, WA | 206.617.4295 | pinyi.yang85@gmail.com

---

## SKILLS

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

**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

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

- Designed, developed and deployed full-stack web applications with GraphQL wrapped RESTful service by Node, Express, and React (Hooks) front-end in Typescript.
- Developed data analysis logic and implemented data visualization with Google Chart API or React-Vis.
- Implemented user authentication with OAuth and JWT.

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

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

- Served as lead developer in a team with 3~4 developer. Designed web applications with UX designers.
- Designed, modularized and developed full-stack apps with Node/Express RESTful service and React front-end in Javascript. Distributed tasks to members and planned development to meet deadline.
- Reviewed, debugged and integrated fellow developers' code as git master.

## 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 Matlab and Python scripts for data collection, analysis and visualization. Refactored data for machine learning to identify target activity, or disease prediction and forestalling.
- Collaborated with Texas Medical Center Researchers to evaluate device with live animal tests.

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

- Developed logic to simulate materials metamerism (color matching issue under different light) for textile and dye products.
- Collaborated with software engineer in python application development and tested applications.

## 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