

# Can Deng

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[GitHub](#) | [Personal Website](#) | [LinkedIn](#)

## WORK EXPERIENCE

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Module Development Engineer, Analog Devices Inc.

07/2019 – present

- Developed a web application with **React.js** and **Spring Boot** for automatic generation of datasheet graphs and file upload/download
- Built applications in **Java** and **VBA** to complete tasks which were done manually before, eliminated human mistakes and significantly improved efficiency by 95%
- Developed VBA apps to simplify tasks such as import, analysis and visualization of large data sets

## TECHNICAL SKILLS

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**Languages**                    Java, Python, C, C++, VBA, HTML, CSS, JavaScript  
**Web Development:**       Spring Boot, React, Redux, GraphQL, Express.js, Gatsby.js, Node.js, Spring MVC, Thymeleaf, Bootstrap  
**Databases:**                PostgreSQL, MongoDB, Firebase, MySQL  
**Tools & Platforms:**       Git, Docker, Stripe, MongoDB Atlas, Netlify, Heroku, GCP, AWS

## EDUCATION

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**University of Michigan**

09/2017 - 05/2019

M.S. in Electrical and Computer Engineering, GPA: 3.92/4.0

**University of Electronic Science and Technology of China (UESTC)**

09/2013 - 07/2017

B.E. in Electrical Engineering, GPA: 3.82/4.0

## PROJECTS

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**Gem Clothing (React, Redux, Firebase, GraphQL, Express, Stripe)**

[\[Demo\]](#)

Full stack **E-commerce** web application for a clothing shop

[\[Github\]](#)

- Developed a **React** SPA web application featuring login, add-to-cart, payment and cross-device support
- Integrated **Firebase** for login authentication and shopping data storage
- Integrated **Stripe** platform and built **Express** backend for Stripe payment server
- Improved data query efficiency and flexibility with **GraphQL**

**Project Management (Spring Boot, PostgreSQL, Docker, AWS)**

Full stack **Spring Boot** web application for employees and projects management

[\[Github\]](#)

- Integrated **PostgreSQL** to store data of project and employee details
- Implemented user authentication and authorization with **Spring Security**
- Refactored and improved system throughput by decoupling services using **RESTful API**
- **Dockerized** the application and deployed to **AWS EC2** and **RDS**

**Footprint (Node.js, Express.js, MongoDB, Google Maps APIs, Passport.js, Bootstrap 4)**

[\[Demo\]](#)

Full stack web travel blog application

[\[Github\]](#)

- Built an **Express** web app where users can log in, post and view travel blogs and comments
- Designed and implemented **MongoDB** structure to store blogs and comments data
- implemented user authentication with **Passport.js** and embedded google maps with **Google Maps API**

**BearMaps (Java Spark)**

[\[Demo\]](#)

Web mapping application hosted on **Heroku**

[\[Github\]](#)

- Implemented backend features such as **map rastering, zooming/dragging, autocomplete and search, routing and turn-by-turn navigation**
- Improved time complexity significantly by using **A\* algorithm** and **K-D tree** to find the shortest routes, and **Trie tree** for quick autocomplete suggestions in location search

**Gitlet (Java)**

Mini version control system inspired by **Git**

[\[Github\]](#)

- Designed and built Gitlet that can stage, track and commit files, view current status and commit history, revert to previous versions, create and merge branches both locally and remotely