

# Dingyu Peng

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GitHub: <https://github.com/doublehiddenblade/Zatoichi>

Portfolio website: <https://doublehiddenblade.github.io/dingyupeng.github.io/>

## Objective

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Bachelor's degree in mechanical engineering and studying towards Master's degree in computer science. Experience in web development, App development, machine learning, data visualization, Graphical User Interphase development, computer vision system development. Looking for software engineering internship positions.

## Education

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**University of Illinois Urbana-Champaign**, 08/2015-05/2019

Bachelor of Science in Mechanical Engineering

Technical GPA: 3.38/4.00

Expected Graduation: May 2019

Minor: Computer Engineering

Related Coursework: Data Structures Honors (Spring 2019), Manufacturing Data and Quality Systems (Fall 2018), Computer Systems and Programming (Summer 2018), Robotic Dynamics and Control (Spring 2018), Intro to Computing (Spring 2018)

## Projects

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**Web Development: uiucphoton.com** 04/2019 – 05/2019

- Built a video website for school film club and launched on Amazon AWS server, club managers can log in to manage video and image content
- Implemented dynamic content management with Django framework and SQLite upon client request
- Achieved front end development with Bootstrap, HTML, CSS, Javascript

**Augmented Reality App Development (UIUC Technology Services)** 01/2019 – 05/2019

- Built an android app that recognizes objects on campus and displays introduction video on the object
- Achieved with Unity 3D, Vuforia, Android SDK

**Vehicle Hail Damage Detection System (Senior Design)** 01/2019 – 05/2019

Univ. Illinois Urbana-Champaign, IL

- Coordinated with hardware team to build a car scanner system which scans hail damaged car for number and sizes of hail dents and estimate repair cost, sponsored by Ally Financial Inc.
- Responsible for software development, hardware-software integration, and Graphical User Interphase.
- Developed a horizontal component extraction method to detect dents from stripe pattern distortion
- Achieved with Raspberry Pi, Python, OpenCV, Scikit-learn

**Machine Learning and Manufacturing** 06/2018 – Now, “Big Data in Manufacturing”

Univ. Illinois Urbana-Champaign, IL

- Worked as an undergraduate research assistant for the Digital Manufacturing Lab
- Investigated relationship between ultrasonic welding input signals and weld quality
- Trained a predictive model with Quadratic Discriminant Analysis (QDA) classifier to predict weld quality
- Named as the second author for a submitted ASME conference journal

**Identification of Graphene with Computer Vision** 09/2018 – 12/2018

Univ. Illinois Urbana-Champaign, IL

- Implemented a machine learning algorithm to automatically extract locations and coverage of graphene from microscopic images using OpenCV
- Achieved a 71% test accuracy with Gaussian kernel classifier

**Turn Based Strategy Game** 01/2019 – Now

- Developed a risk style turn based strategy game with python using pygame library out of personal interest
- Invented unique game rules in which player fights several AI opponents to conquer all regions on the map