

Jingpei LU

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EDUCATION

University of California - San Diego <i>Master of Science in Intelligent System, Robotics and Control</i> <ul style="list-style-type: none">Relevant Coursework: Computer Vision, Digital Image Processing	<i>Sep 2018 - Dec 2019</i> <i>La Jolla</i>
University of California - San Diego <i>Bachelor of Science in Electrical Engineering</i> <ul style="list-style-type: none">Major GPA: 3.71 / 4.0Honors/Awards: Provost Honors (8 quarters), IEEE Quarterly Project AwardRelevant Coursework: Pattern Recognition and Machine Learning, Linear and Nonlinear Optimization, Probability and Random Process, Linear Control System Theory	<i>Jun 2018</i> <i>La Jolla</i>

RESEARCH EXPERIENCE

The Statistical Visual Computing Laboratory (SVCL) at UCSD <i>Undergraduate Researcher</i> Deep Learning for Plankton Image Retrieval <ul style="list-style-type: none">Developed a content-based image retrieval system for plankton images using a deep convolutional neural network (Resnet50) which assisted biological oceanographers in researching and labeling the plankton imagesResearched on different neural network models and fine-tuning process, which improved the precision of retrieval system by about 30%Accelerated the searching process by implementing approximate nearest neighbor algorithm and building the search trees beforehandPresented the final system at the Summer Research Conference and received positive feedbacks from faculties and scientists	<i>Jan 2018 - Aug 2018</i> <i>La Jolla</i>
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PROJECT EXPERIENCE

Autonomous R/C Vehicle <ul style="list-style-type: none">Built a remote control vehicle that can autonomously run on an outdoor scaled trackImproved the vehicle by adding traffic signs recognition functionality and speeding up the video processing efficiency three times using the multi-threaded approachAccomplished the goal of self-steering and simulating city driving, and ranked the first on the team competition <i>(OpenCV, Neural Network, Raspberry Pi)</i>	<i>Mar 2018 - Jun 2018</i>
Drone Integration for RF Scanner Payload <ul style="list-style-type: none">Integrated an RF scanning payload with a drone (DJI Matrice 100) to automate the processes of detecting wireless signal's strength in open areaDeveloped a mobile app to record the signal strength data and generate the heatmap which can visualize the data better <i>(Java, C++, DJI onboard and mobile SDK, Github)</i>	<i>Jan 2018 - Mar 2018</i>
Movie Recommender System <ul style="list-style-type: none">Utilized the movie rating data from the MovieLens dataset and preprocessed the data by categorizing and scaling the variablesBuilt a three-layer neural network and trained it to predict people's preferences on moviesAnalyzed the data and created the graphs to visualize preferences of people in different groups, which contributed to further research in the industries for observing patterns to advertise in the better way <i>(Numpy, Pandas, Matplotlib)</i>	<i>Sep 2017 - Dec 2017</i>

PROFESSIONAL EXPERIENCE

Wangsu Science & Technology Co., Ltd. <i>Summer Internship - Customer Technical Support</i> <ul style="list-style-type: none">Assisted the technical support team in diagnosing and resolving the system issues and creating standard procedures for proper escalation of unresolved issues to the appropriate internal teamsEvaluated and analyzed the clients' feedback, reported to the supervisor and made recommendations, which improved the efficiency in targeting on potential customersManaged the company's recruiting training program and evaluated the performance of new employees	<i>Jul 2017 - Sep 2017</i> <i>Xiamen</i>
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MISCELLANEOUS

- Skills:** Python (Tensorflow, Keras), Matlab, Java, C++
- Languages:** English (Fluent), Mandarin Chinese (Native)
- Activities:** IEEE at UC San Diego, Intramural Sports Competition (Soccer), Summer Research Internship Program
- Professional Development:** Deep Learning Nanodegree Program (CNNs, RNNs, GANs, Reinforcement Learning)