

# Gengshuo TIAN

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## EDUCATION

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2015 - present	BSc Candidate in MATHEMATICS AND APPLIED MATHEMATICS, <b>Beijing Normal University</b> GPA: 96.02 / 100, ranked 1 / 52
APR-JUN 2018	Exchange Program at <b>University of California, San Diego</b> GPA: 4.00 / 4.00
JUL 2017	Summer School in Computational and Applied Mathematics at <b>Peking University</b> Outstanding student
JUL-AUG 2016	Summer Sessions at <b>College of William and Mary</b> GPA: 4.00 / 4.00

## SCHOLARSHIPS AND HONORS

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2016 & 2017    National Scholarship

## EXPERIENCE

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<i>Current</i> SEP 2018	Undergraduate research in NEURAL INFORMATION PROCESSING LAB at Peking University Instructor: Si Wu Studying the noise structure of balanced networks and its implication on fast response. Also conducting theoretical analysis of a model of balanced orientation selectivity formation in mouse visual cortex during critical period based on BCM theory with lateral inhibition.
AUG 2018 JUN 2018	Volunteering in COMPUTATIONAL NEUROBIOLOGY LABORATORY at Salk Institute Instructor: Terrence Sejnowski Worked with Dr. Dongsung Huh to analyze the mechanisms of a spiking neural network trained with gradient descent to do the XOR task. Various techniques including tensor component analysis (TCA) were employed.
MAR 2018 SEP 2017	Undergraduate research in NEURAL INFORMATION PROCESSING LAB at Beijing Normal University Instructor: Si Wu Worked on the theoretical analysis of a new model of hierarchical memory retrieval with feedback modulation in hierarchical neural networks. The work was based on Hopfield networks but the underlying principles are potentially applicable to other kinds of networks in general.
JUN 2018 JUN 2017	NATIONAL TRAINING PROGRAM OF INNOVATION AND ENTREPRENEURSHIP FOR UNDERGRADUATES Instructor: Jingang Xiong Studied the asymptotically symmetric solutions of a class of quasilinear elliptic equations through analysis of the corresponding ODE.
NOV 2017 APR 2017	INTERNATIONAL GENETICALLY ENGINEERED MACHINE COMPETITION (iGEM) (Team BNU-China) Developed mathematical models to assist the team's effort to display fibrous biopolymers on the yeast surface. Modeling work highly regarded by the judges.

## SKILLS

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Language	TOEFL iBT: 118 / 120 GRE: Verbal 165 / 170, Quantitative 170 / 170, Analytical Writing 4.5 / 6.0
Programming	MATLAB