# **Chunpeng James Chen**

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#### EDUCATION

2016-	Ph.D. candidate, Crop Science
Present	Washington State University, Pullman, WA, USA
	Dissertation: Improving Wheat Breeding Processes by the Integration
	of Computational Approaches and Biological Problems
2010-2014	B.S., Agronomy
	National Taiwan University, Taipei, Taiwan

# **PROFESSIONAL POSITIONS**

2016-	Graduate Research Assistant
Present	Department of Crop and Soil Sciences, Washington State University,
	Pullman, WA, USA
2016-2016	Research Assistant
	Institute of Plant and Microbial Biology, Academia Sinica, Taiwan
2015-2016	Data Analyst
	Yu-Shun International Cultural CO., LTD, Taipei, Taiwan
2014-2015	Corporal
	564 Armor Brigade, 8 <sup>th</sup> Army Corps, Republic of China Army, Taiwan
2012-2014	Undergraduate Research Assistant
	Department of Agronomy, National Taiwan University, Taipei, Taiwan

# TEACHING EXPERIENCE

**Teaching Assistant** for Statistical Genomics (CropS 545) at Washington State University, Spring semester, 2017.

# **PROFESSIONAL ACTIVITIES**

# Guest Lectures

Guest Lecture	
May, 2018	<i>CropS 545: Statistical Genomics</i> Introduction to Machine Learning and Ensemble Methods
Feb, 2017	<i>CropS 545: Statistical Genomics</i> Principal Component Analysis
Oral Presenta	tion
Mar, 2018	WSU Plant Sciences Retreat 2018
	GWAS and GS are as easy as clicking and dragging with iPat.
Feb, 2018	The World Congress on Genetics Applied to Livestock Production,
	2018
	GWAS and GS are as easy as clicking and dragging with iPat.
Jan, 2018	Plant and Animal Genome XXVI (PAG 2018), iPat: Intelligent
	Prediction and Association Tool for Genomic Research
Nov, 2017	Crop Sciences Seminar at Washington State University
	Application of Random Forest in Genomics Selection
May, 2017	Plant and Animal Genome Asia 2017 (PAG Asia 2017)
NA 0047	Intelligent prediction and association tool for genomic research
May, 2017	Plant and Animal Genome Asia 2017 (PAG Asia 2017)

# Segregation Analysis and Its Implementation in iPat

#### Poster Presentation

Mar, 2018	2018 WSU Plant Science Symposium
	iPat: intelligent prediction and association tool for genomic research
Jan, 2018	Plant and Animal Genome XXVI (PAG 2018), iPat: Intelligent
	Prediction and Association Tool for Genomic Research
May, 2017	Plant and Animal Genome Asia 2017 (PAG Asia 2017)
	Intelligent prediction and association tool for genomic research
Jan, 2017	Plant and Animal Genome XXV (PAG 2017)
	Interface of Prediction and Association for Genomics
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#### Ad Hoc Reviewer

Bioinformatics, Crop & Pasture Science, and PLoS One

# COURSEWORK (GPA 3.82)

CptS 121	C / C++ Program Design & Development
CptS 122	C / C++ Data Structure
CptS 483	Introduction to Machine Learning
CptS 570	Machine Learning
Hort 503	Intro to Computing Data Science
Hort 503	System Biology
MBioS 578	Bioinformatics
BSysE 552	Unmanned Aerial System in Agriculture

# **PROGRAMMING SKILLS**

Java, R, Python, C, C++, Bash, JavaScript, and Perl.

# SOFTWARE DEVELOPED

iPat: Intelligent Tool for Prediction and Association (<u>http://zzlab.net/iPat</u> and <u>https://github.com/Poissonfish/iPat</u>).

#### FOUNDING RECEIVED

- Washington Wheat Foundation, \$3,238, Principal Investigator, "Instant and non-destructive prediction of wheat Hagberg falling number from hyperspectral imaging by using parallel computation with graphics processing units (GPU)", November 8, 2018 – November 7, 2019,
- Travel grant of International Conference of Plant and Animal Genome, 2018, \$1,300

# PUBLICATIONS

- Chen C, Zhang Z. (2018) iPat: intelligent prediction and association tool for genomic research. <u>Bioinformatics</u>, <u>34</u>, <u>1925-1927</u>.
- 2. Chen C, Zhang Z. (2018) GWAS and GS are as easy as clicking and dragging with iPat. <u>The World Congress on Genetics Applied to Livestock Production</u>.

#### AWARDS

2018-2019	Vogel Washington State Crop Improvement Association Scholarship
2018- 2019	Roscoe and Frances Cox Scholarship
Oct, 2017	2 <sup>nd</sup> place for the 3 <sup>rd</sup> Annual WSU Hardware Hackathon
Jun, 2017	Winner of Student Workshop Competition at PAG Asia