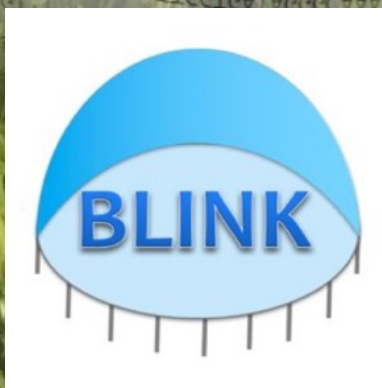
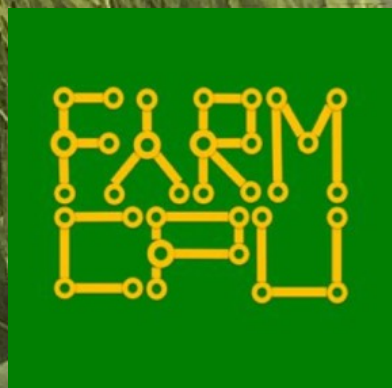


Zhiwu Zhang Laboratory

for Statistical Genomics



Method
and software
innovation for
gene mapping and
molecular breeding



ZZLab.net

Shiwei Zhang Laboratory

for Statistical Genomics

Solve
biological analytical
challenges through
statistics, statistical
learning, machine learning,
and artificial intelligence



ZZLab.net

Shiwu Zhang Laboratory

for Statistical Genomics

Home People Publication Research Teaching Software Outreach Jobs

Both



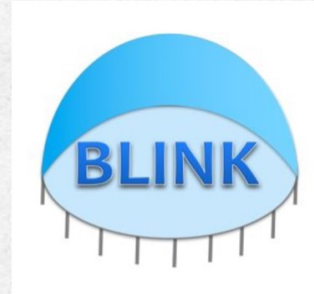
GAPIT



iPat



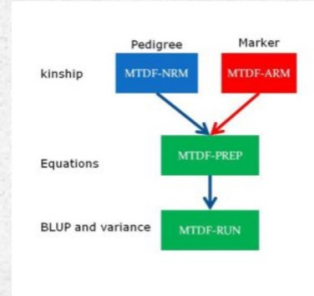
mMAP



Blink



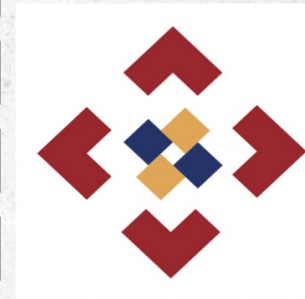
FarmCPU



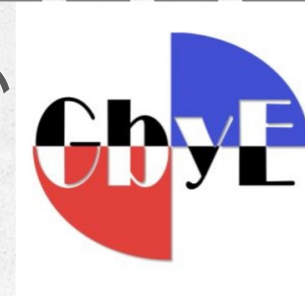
MTDFREML



GRID



GridFree



GbyE

Phenomics



AI4EVER



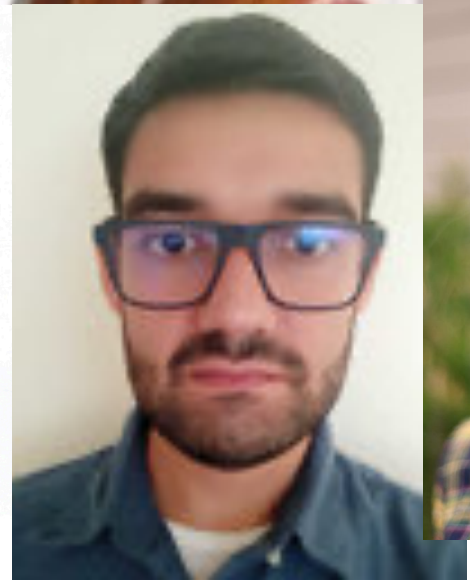
Rooster



Audio4EDU

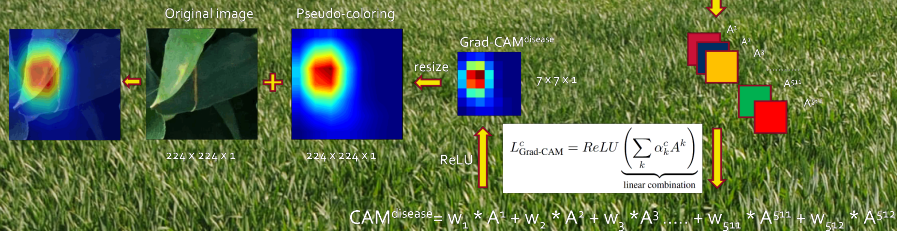
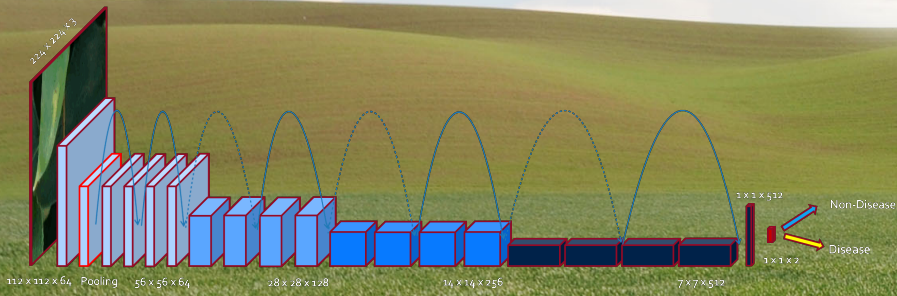
Artificial Intelligence

GWAS



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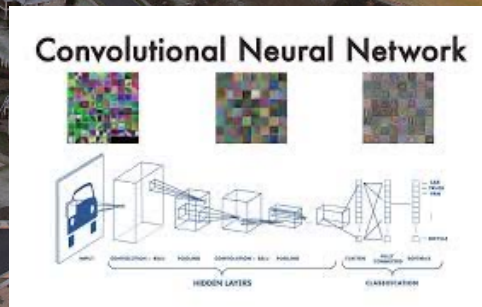
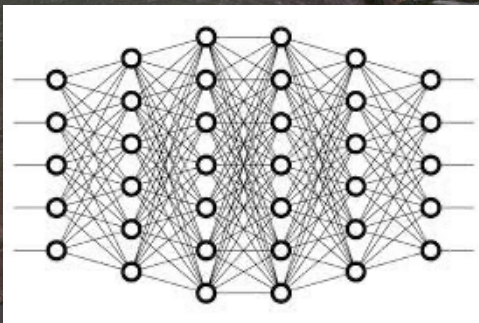
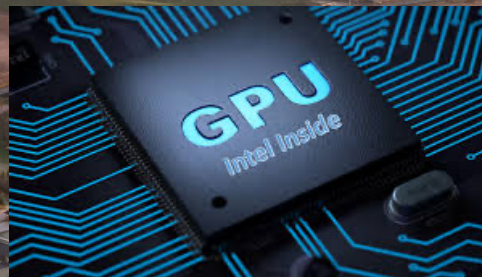
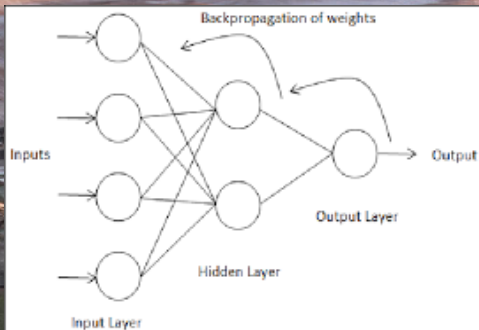
Stripe rust
detection



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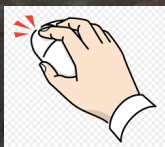
for Statistical Genomics

Build a path for everyone
to succeed in AI



AI4
Everyone

Plug&Play





- ✓ Segment
- ✓ Count
- ✓ Measure

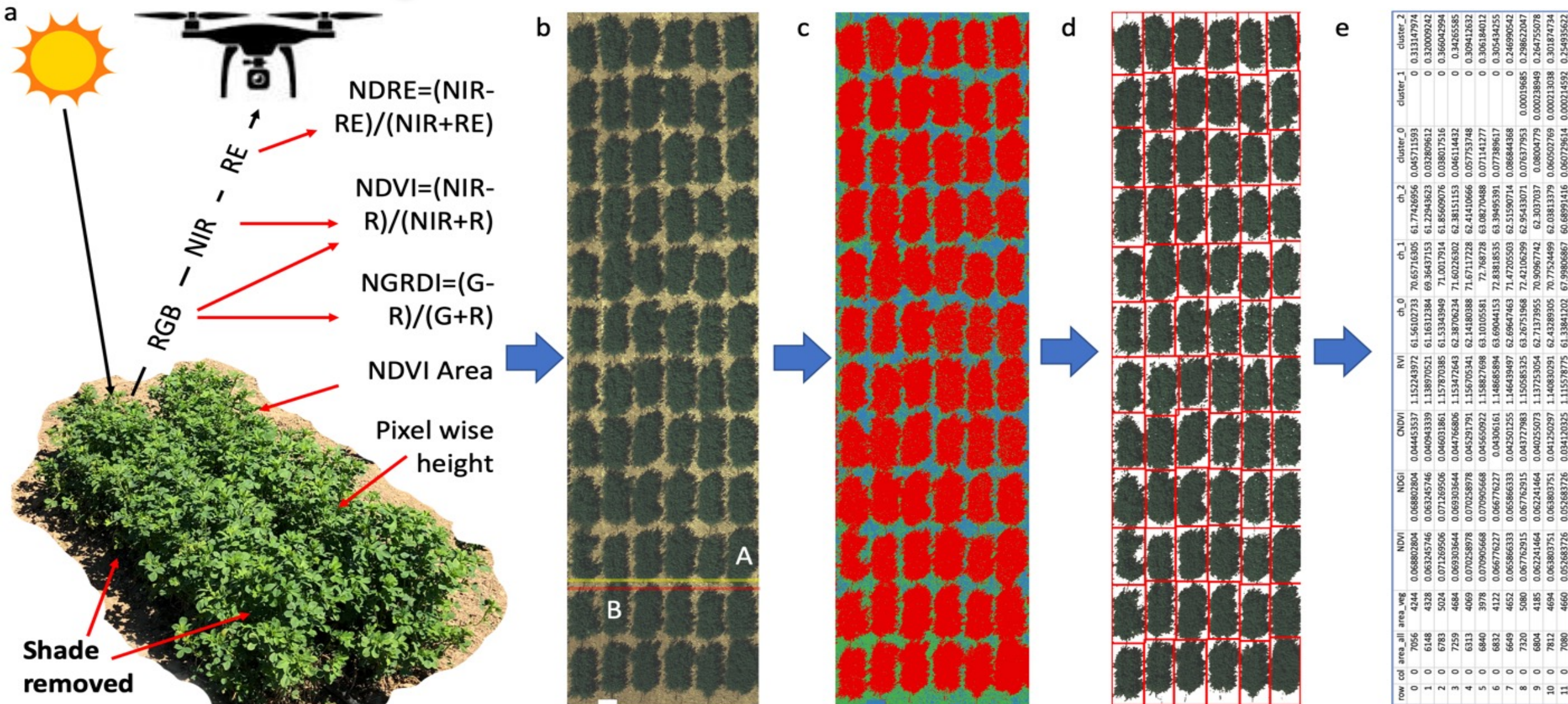
GridFree: a python package of imageanalysis for interactive grain counting and measuring 

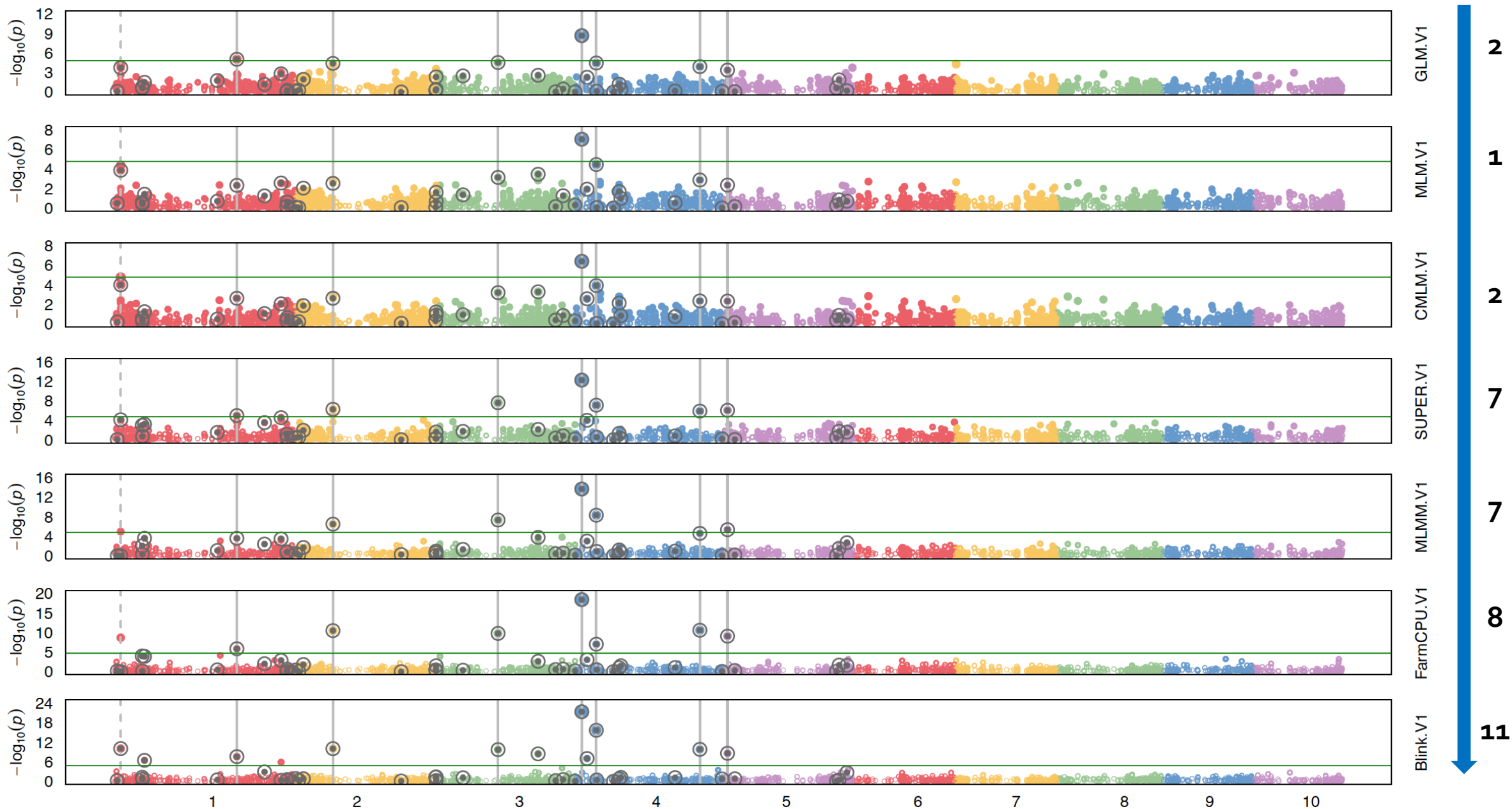
Yang Hu, Zhiwu Zhang ✉ [Author Notes](#)

Plant Physiology, Volume 186, Issue 4, August 2021, Pages 2239–2252,
<https://doi.org/10.1093/plphys/kiab226>

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Statistical Genomics

Genome Wide Association study (GWAS) and Genomic Selection (GS)

Graduate student course

- ✓ Tools for genomic research
- ✓ Gene mapping via GWAS
- ✓ Molecular breeding via GS
- ✓ Advanced R programming
- ✓ Bioinformatics certificate

Cross listed by five departments

- ✓ ANIM_SCI 545
- ✓ BIOLOGY 545
- ✓ CROP_SCI 545
- ✓ HORT 545
- ✓ PLP 545

Statistical Genomics

Classes
Since 2015



2018



2015



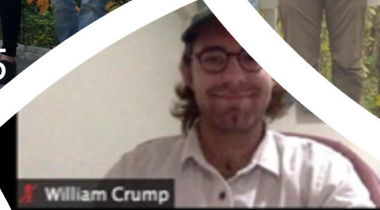
2017



2016



2023



William Crump



Vance Merrick



Matthew McGowan



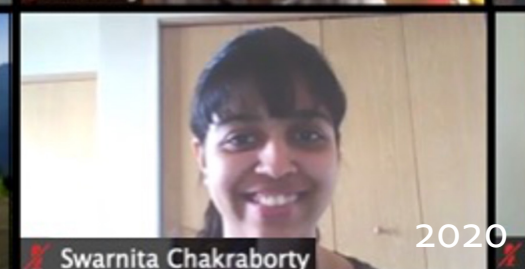
Marc Beer



Fan Zhang



atit parajuli



Swarnita Chakraborty

2020

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Appreciation to our people
and funding agencies

