

# Arun Durvasula

@arundurvasula

Department of Plant Sciences  
University of California  
1 Shields Ave.  
Davis, CA 95616

Phone: (408) 656-6358  
Email: [adurvasula@ucdavis.edu](mailto:adurvasula@ucdavis.edu)  
Blog: [www.arundurvasula.wordpress.com](http://www.arundurvasula.wordpress.com)  
Github: [www.github.com/arundurvasula](http://www.github.com/arundurvasula)

## Education

BS Biotechnology, Microbiology and Fermentation, University of California Davis 2015 (expected)

High School Diploma, Saint Francis High School, Mountain View, CA 2011

## Experience

Intern, Ross-Ibarra Lab.

June 2013 - Present

**Evidence of selection on putative sugar transport genes:** used population genetic methods to look for evidence of selection on genes putatively linked to sugar transport in *Zea mays* spp. *mays* endosperm.

**Re-estimation of the maize domestication bottleneck:** used genetic simulations on a large computer cluster to re-estimate the strength of the maize domestication bottleneck using R and open source scientific software.

**Lab Documentation:** wrote documentation and tutorials for computer cluster usage for use by lab members.

**Libsequence:** contributed to open source library libsequence to add support for the VCF file format.

Technical Reviewer, O'Reilly Media.

December 2013 - Present

**Bioinformatics Data Skills by Vince Buffalo:** ensured accuracy of code and information in upcoming book.

Research Assistant, Tagkopoulos Lab.

January 2013 - June 2013

**Escherichia coli simulator:** created the methodology used to model the metabolism in a novel whole cell simulation of *E. coli* using Matlab.

## Skills

Programming: Python, Bash, Awk, C, C++, Ruby, Java, Javascript, HTML, CSS

Frameworks/Libraries: Django, Rails, Scikit Learn, Scipy, Numpy, Matplotlib

Tools: Git, IPython, LaTeX, Slurm, Sun Grid Engine

Data analysis: R, Matlab, MySQL, Machine learning,

Hardware: Arduino, Raspberry Pi

Molecular biology: PCR, Gel electrophoresis, RFLP, Bacterial transformation, Genomic DNA isolation

## References

### **Jeffrey Ross-Ibarra**

Associate Professor  
Dept. of Plant Science  
University of California  
Davis, CA. 95616  
email: rossibarra@ucdavis.edu

### **Ilias Tagkopoulos**

Assistant Professor  
Dept. of Computer Science  
University of California  
Davis, CA. 95616  
email: itagkopoulos@ucdavis.edu

### **Javier Carrera**

Postdoctoral Research Associate  
Dept. of Bioengineering  
Stanford University  
Stanford, CA. 94305  
email: jcarrera@stanford.edu