

Education

- **University of Missouri at Columbia** *Aug 2012 – Now*
Graduate Student, PhD track, Bioinformatics. Research and Teaching Assistant.
- **Truman State University** *Jan 2008 – Dec 2011*
BSc, Computer Science. Graduated with Department Honors. Major GPA: 3.91

Research Interest

- **Bioinformatics:** Big data, high performance computing, metagenomics, molecular evolution.
- **Informatics and linguistics:** Cryptography, privacy and security, natural language processing.
- **Novel architectures:** Embedded processors (MSP, AVR, ARM), heterogeneous parallel systems (Nvidia CUDA), embedded software development, [electronics and circuits](#).
- **Education:** Trends and new opportunities for enabling global life-long learning.

Skill

- **Programming languages:** C/CUDA, Java, Go, UNIX Shell, PHP, HTML/CSS, JavaScript, Python, R statistics. Familiar with Perl, MySQL, Prolog. Work with Git, LaTeX, Linux. [Github account](#)
- **Languages:** English (Advanced), Vietnamese (Fluent), Spanish (Beginner).

Work Experience

- **The Genome Institute of Singapore** *May 2015 – Aug 2015*
(Intern) Research Officer. Dr. Pauline Ng's lab, GIS, A*STAR, Singapore.
- **Missouri Informatics Institute** *Aug 2012 – Now*
Research and Teaching Assistant. Dr. Conant's lab, University of Missouri, Columbia, MO.
- **Human-Computer Interaction Institute** *May 2011 – Jul 2011*
(Intern) Undergraduate Researcher. Carnegie Mellon University, Pittsburgh, PA.
 - Implemented conversational capability for simulated student agent to study peer-learning.
- **Information Technology Services** *Mar 2008 – Aug 2012*
Software and Web Developer. Truman State University, Kirksville, MO.
 - Planning and implementing high-tech classrooms. Developing the Truman Mobile app.

Selected Publication

- H. Truong, D. Li, K. Sajjapongse, G. Conant, and M. Becchi. Large-scale pairwise alignments on gpu clusters: Exploring the implementation space. *Journal of Signal Processing Systems*, pages 1–19, 2014
- M. J. Ellison, G. C. Conant, R. R. Cockrum, K. J. Austin, H. Truong, M. Becchi, W. R. Lamberson, and K. M. Cammack. Diet alters both the structure and taxonomy of the ovine gut microbial ecosystem. *DNA Research*, page dst044, 2013

Hobbies and Projects

- **What do I do in my free time?**

[Full list of projects](#)

- [High altitude balloon](#): Engineering, launching and retrieving high altitude balloons in near space. I am also planning to teach STEM education on balloons launch for K-12 students worldwide.
- [Android Sophia Keyboard](#): Smart keyboard enabling very fast Vietnamese input based on fuzzy word matching/edit distance alignment. 10000+ installs.
- [Google Two-Factor Authentication in a Wristwatch](#). Enabling two-factor authentication on the Texas Instrument Chronos watch Platform.
- [Truck, Thin Ubuntu-based distribution](#): A Linux distribution designed to boot on diskless, low-cost, distributed compiler client workstations for on-campus computer labs.