HUAN TRUONG

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Github: *github.com/htruong*
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I deliver reliable, performant, and secure software on PCs, on GPUs, in vehicles, and in space.
I am looking for an opportunity to deliver a great product that customers and developers love.

Education

- **University of Missouri – MO** – Ph.D. Candidate in Bioinformatics   *Aug 2012 – Aug 2018*
- **Truman State University – MO** – B.S. in Computer Science. Department Honors   *Jan 2008 – Dec 2011*

Work Experience

- **Crankshaft GNU/Linux – Raleigh, NC** – Founder, developer   *Jan 2018 – Present*
  - Founded Crankshaft, a distro that transforms the Raspberry Pi to an open source Android Auto car head unit. Hundreds of real deployment, 600 stars in the first month published on Github – #1 shell project in Raleigh.
  - Managed the project: Project planning, implementing features, engaging users, writing documents, engaging the community, collaborating with developers, fixing hard/software bugs, making deadlines.
  - Technologies: Bash, C, C++, Git, Protobuf, cross-compiling, virtualization, Linux, embedded.

- **University of Missouri, Evolutionary Systems Lab – Columbia, MO** – Research Assistant   *Aug 2012 – Present*
  - Conducted research on filtering noise from multi-dimensional biological data using high-performance computing.
  - Published papers on CUDA-accelerated sequence alignment, taxonomic clustering, motif finding.
  - Technologies: CUDA (40x speedup), Go, C, C++, Bash, R, Gephi, graphs, bioinformatics, Git.
  - **Publications**: Google Scholar Profile: Huan Truong N.H.

- **A*STAR, Genome Institute of Singapore – Singapore** – Research Officer   *May – Aug 2015*
  - Assisted in kick-starting *factpub.org*, a project that promotes open science. Crafted a browser extension that allows researchers to annotate on academic papers and share their annotations.
  - Technologies: Javascript, HTML, Go, Bash.

- **Carnegie Mellon University, Human-Computer Interaction Institute – Pittsburgh, PA** – Summer REU Intern *May – Jul 2011*
  - Conducted research on enhancing AI conversational capability leading to more effective learning-by-teaching.
  - Technologies: NLP, R, Java, CVS.

- **Truman State University, IT Services – Kirksville, MO** – Software and Web Developer   *Mar 2008 – Aug 2012*
  - Took various roles including helping end-users, developing monitor-and-control systems for PCs, reducing cost (20x) for classroom hardware installation, creating the campus mobile app, deploying a code repository.
  - Technologies: C, C++, Linux, Web dev, Android/iOS dev, Git.

Other Activities & Recognition

- **High Altitude Balloon (HAB) Education** – hab.education – Co-Founder   *Oct 2014 – Present*
  - Provided opportunities for high school students to get involved in STEM by working on HAB launches to near space.
  - Engineered and optimized software & hardware, planned lesson plans, organized workshops and outreach events.
  - Technologies: Embedded/AVR/Arduino, Serial communication, GPS, Ham radio/APRS, Go, NodeJS

- **Other activities** –
  - Learner: Completed the first-ever MOOC course on elementary electronics (Grade: A) (2012).
  - Security researcher: Developed Two-Factor Authentication in a Wristwatch - Ultra low-power on 2KB RAM.
  - Bug Hunter: #333 globally on Google Vulnerability Research Hall-of-Fame (Apr 2018)
  - Firmware developer: Worked on and submitted patches to various open-source projects: OpenWRT, Cyanogen-Mod, exfat Linux driver, esp. Chumby to bring up new features and fix bugs (2012-2017).
    Developed EzPi4ME – enabling flashing of 100% free software firmware on commodity Chrome laptops (2017).
  - Campus volunteer: MU Informatics Institute, Vietnamese Student Association, Free Software Club.