# RANSOM WILLIAMS

601 212 4980 \$\diamonus \text{auvergnerw@gmail.com}\$

#### **EDUCATION**

### California Institute of Technology

June 2010

B.S. in Mathematics

Abstract algebra, real and complex analysis, topology, combinatorics, dynamical systems Special relativity, one-dimensional quantum mechanics Fluid flow and Thermodynamics (Mech. Engineering)

## Southwest University for Nationalities

October 2012 - July 2014

Mandarin language courses

### RESEARCH EXPERIENCE

### SURF (Summer Undergraduate Research Fellowship), Caltech

Summer 2004

Mechanical Engineering, Prof. Hunt

· Granular flow research to study the booming dunes phenomenon

# SURF (Summer Undergraduate Research Fellowship), Caltech

Summer 2005

Mathematics, Prof. Wilson

- · Studied Tutte's 5-flow conjecture, an old problem
- · Proved a restricted case

### Ecoinformatics Summer Institute, OSU

Summer 2007

 $Ecology,\ Atmospheric\ Science,\ Computer\ Science,\ Mech.\ Engineering\ ,$ 

- · Work with undergraduate and early graduate researchers in an multidisciplinary environment
- · Studied shallow, gravity-driven fluid flow

### WORK EXPERIENCE

Systems Developer

### Cinafides Consulting

March 2013 - June 2014

Chengdu, China

- · Rapid prototyping of web and mobile applications
- · Hacked out some short-term projects
- · Gained business experience and client-facing insight

**Synaptics** 

March 2011 - July 2012

Simulation Engineer

Santa Clara, CA, USA

- · Designed, developed, and maintained automated hardware testing framework
- · Firmware build system edits

#### TECHNICAL STRENGTHS

Computer Languages

C, Python, Java, Bash, Haskell, Clojure, Javascript

APIs android, django, flask, express, play

Tools emacs, make, npm, intellij, git, maven, Debian