

# Vincent Yang

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## SKILLS

### PROGRAMMING

Proficient:

Python • Java • C++ • JavaScript  
jQuery • HTML • CSS

Familiar:

R • Bash Scripting • C  
Logstash • Elasticsearch • Kibana

### PLATFORMS & FRAMEWORKS

Linux • Meteor • Flask • Node.js • MySQL  
MongoDB • PostgreSQL • SQLite

### USEFUL TOOLS

Travis CI • Jenkins • Git •  $\text{\LaTeX}$   
gdb • nose • Vim • Heroku  
Metasploit • Wireshark • Nmap

## EDUCATION

### M.S. IN COMPUTER SCIENCE

UC DAVIS

Incoming Dec 2017 | Davis, CA  
Focus in Computer Security

### B.S. IN COMPUTER SCIENCE

UC DAVIS

Expected Dec 2017 | Davis, CA  
Cumulative GPA: 3.4/4.0

## COURSEWORK

### GRADUATE

Surveillance Resistant Communications

### UNDERGRADUATE

Cryptocurrency Technologies (*Instructor*)  
Algorithm Design  
Data Structures & Programming  
Databases  
Networks  
Cryptography

## AWARDS

Google Games 2017 (*1<sup>st</sup>*)  
Teradata Annual Intern Hackathon (*1<sup>st</sup>*)  
HackDavis Best Use of Amazon Alexa (*2<sup>nd</sup>*)  
CITRIS Mobile App Challenge (*2<sup>nd</sup>*)  
Boy Scouts of America (*Eagle Scout*)

## EXTRACURRICULARS

Davis Computer Science Club (*Tutor*)  
HackDavis (*Developer*)  
Davis Consulting Group (*VP, Developer*)

## EXPERIENCE

### COURSE HERO | FULL STACK SOFTWARE ENGINEER INTERN

Upcoming Summer 2017 | Redwood City, CA

- Full stack development with Linux, Apache, MySQL, PHP, Python, React

### TERADATA | CONTINUOUS INTEGRATION/DEVOPS INTERN

June 2016 – September 2016 | San Diego, CA

- Created a site to track 400+ projects using Python, TeamCity, and Github REST APIs, MySQL, HTML/CSS, JavaScript, Perl
- Extended svn2git with Ansible, Jenkins, Git, Svn for 11,000 employees
- Built a dash to monitor Github & TeamCity with Elasticsearch, Logstash, Kibana
- Automated Jira workflows with webhooks, REST APIs, MySQL & Python

### UC DAVIS COLLEGE OF ENGINEERING | INSTRUCTOR

January 2016 – June 2016 | Davis, CA

- Co-taught/planned/created **Cryptocurrency Technologies** - a class on creating digital currency from cryptographic primitives and distributed consensus protocols
- Covered advanced topics such as Bitcoin, Bitcoin Lightning, Ethereum, DAO
- Designed and implemented 5 assignments, programs, and grading scripts in Python

### IDENTITYMIND GLOBAL | SOFTWARE ENGINEERING INTERN

June 2015 – August 2015 | Palo Alto, CA

- Created a web crawler and scraper in Python with urllib, Scrapy, and BeautifulSoup to fill a MySQL database of 1,000,000+ criminal profiles
- Tested for cross-site scripting (XSS) vulnerabilities and SQL injections

## RESEARCH

### UC DAVIS ENGINEERING | UNDERGRADUATE SECURITY RESEARCHER

March 2016 – Present | Davis, CA

- Researching OWASP Top Ten with pentest tools such as Metasploit, nmap, Mutillidae, Wireshark, and Kali Linux under **Dr. Matt Bishop** for UC Davis and Intel

### UC DAVIS ENGINEERING | UNDERGRADUATE RESEARCHER

January 2017 – Present | Davis, CA

- Visualizing multidimensional data for CRAN Package freqparcoord under **Dr. Norm Matloff**

## PROJECTS

### PREDICT ELECTIONS | PREDICTED THE 2016 CALIFORNIA PRIMARY

April 2016 – May 2016 | <https://predict-elections.herokuapp.com>

- Utilized Huffington Post API, Node.js, SQLite, JavaScript, HTML5, CSS3, D3.js

### POWER GRID LOAD BALANCER | BALANCE ENERGY DISTRIBUTIONS

April 2015 – May 2015 | code available upon request

- Transformed multiple source/sink to min-energy max-flow graph for BFS

### YELP & CHILL | DISCOVER NEW LOCATIONS FROM YOUR BRICK PHONE

June 2016 – July 2016 | <http://www.yangvincent.com/yelp-and-chill>

- Employed Python, Yelp/Twilio/Google Directions APIs, Travis CI, and Heroku

### LEMPEL-ZIV-WELCH | LOSSLESS COMPRESSION

October 2011 – November 2011 | <https://github.com/YangVincent/FileZip>

- Implemented Lempel-Ziv-Welch lossless data compression with dictionaries, bitwise operators, and StringBuilders to achieve a 45% compression ratio.