#### **Bret Comnes**

Mobile: (707) 633-4552 Email: bcomnes@gmail.com

Portland OR Web: http://bret.io/

# Experience

# Javascript Software Developer

July 2015 - Present

Portland, OR

Jaguar Land Rover

- Rapid development and prototyping of next-generation in vehicle infotainment software.

### Technical Support Engineer

April 2015 - July 2015

Urban Airship

Portland, OR

- Support Urban Airships customers ranging from mobile developers to marketers.
- Custom mailing software for sending personalized emails to customers in Node.js

# Web & Systems Developer

May 2014 - April 2015

PSU Office of Information Technology - Academic & Research Computing

Portland, OR

- Web applications and systems programming with Python and Django.
- Implemented and designed a Github style email correspondence bridge for ARCs ticketing system.
- Implemented user tracking and notification system for ARC's research systems.
- Writing package that tracks MySQL and Postgres database activity of ARCs hosted projects.

### Systems Administrator

May 2013 - April 2015

PSU Office of Information Technology - Academic & Research Computing

Portland, OR

- Responsible for building, automating and monitoring PSU's research servers and Linux Clusters.
- Initiated efforts to automate cluster deployment and management using configuration management.
- Launched a successful user support documentation website to orient new users on the available research systems.
- Trained and introduced new users to ARCs resources and shared unix computing environments.

## Research Assistant to Dr. Erik Sanchez

May 2013 - April 2015

PSU Sánchez Nano Development Lab

Portland, OR

 Wrote custom control software and a web application that enabled remote viewing and operation of a Scanning Electron Microscope over the internet using Web Sockets and WebRTC.

### Lab Instructor & Teachers Assistant

September 2012 - December 2014

Portland State University

Portland, OR

- Instructed PSU's General Physics Labs and assisted in the upper division Experimental Physics Labs.
- Developed two novel labs on the use of microcontrollers and FPGAs covering basic concepts to advanced topics like PID control theory.

#### Textbook Development Consultant

January 2012 - July 2012

Cardinal TS

Remote in Ashland, OR

- Front end Javascript development for a interactive calculus textbook website for Wiley Publishing.
- Provided conceptual content and calculus interpretation for other members of the development team.

#### Research Assistant to Dr. C.D. Hoyle

May 2009 - September 2011

HSU Gravitational Research Laboratory

Arcata, CA

 Designed and machined custom experimental instruments and developed the lab's data collection, automation and analysis software to study the gravitational inverse-square law at sub-millimeter distance scales.

## Research Assistant to Dr. David Kornreich

November 2009

The Arecibo Legacy Fast ALFA Survey

Arecibo, Puerto Rico

 Trained and operated one of the worlds largest radio telescopes and analyzed the collected data searching for previously undiscovered galaxies.

#### Education

Masters in Applied Physics

Portland State University

Bachelor of Science in Physics

Humboldt State University

September 2012 - April 2015 (On leave) Portland, OR

August 2006 - May 2011

Arcata, CA

### Skills

### Operating Systems, Languages, & Applications

- Fluent: Linux/Unix, OS X, Windows, Javascript/Node/npm, Python/Django, Git/Github, Travis-CI, HTML/CSS/SCSS, Ansible, Mathematica, LabVIEW, LATEX
- Familiar: Go, Ruby/Rails, Flask, electron, sh, MySQL, SQLite, PostgreSQL, Assembly, C/autotools, regex, LevelDB
- On the Radar: Haskell, Rust, Puppet, Docker/Rocket, NixOS

Character: Demonstrated proficiency with public communication skills. Exceptional troubleshooting and debugging skills. Adept at rapidly learning new programming languages and tools. Local and remote collaborative skills and methods. Excels at teaching and working with others. Goal driven. Positive.

# Publications, Talks, Community Involvement & Leadership

W3C Social Web Working Group

July 2014 - June 2015

Invited Expert

Code for Portland

March 2014 - July 2015

Organizer ℰ Volunteer

"Development of an Online Teaching Field Emission SEM"

February 2014

Proceedings of the Oregon Academy of Science

Homebrew Website Club

December 2013 - July 2015

Organizer

"Remote Operation of a Scanning Electron Microscope using WebRTC"  $WebRTC\ Camp$ 

October 2013

August 2013

"Distributed Social Web Interactions with Semi-Static Websites"

OSFW3C Workshop on Social Standards: The Future of Business

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OSF W3C Workshop on Social Standards: The Future of Business

IndieWebCamp
Participant and Organizer

2013,2014,2015 - Present

PSU Manufacturing and Fabrication for the Sciences Club
Officer

2013 - December 2014

"Sub-millimeter Positioning and Sensing for Short-Range Gravity Tests"

Proceedings of the 25th National Conference on Undergraduate Research (NCUR)

2011

## **Recent Open Source Contributions**

Node Learnbook E-Book

 $\blacksquare$  github.com/bcomnes/node-learnbook

io.js gurus approve!

 $\sim 38\,000 + downloads/month$ 

- A book about how and where to learn about node and javascript

standard-format Node.js

npmjs.com/standard-format

- Automatically format javascript to conform to standard Javascript Styling rules.

Github: See https://github.com/bcomnes for more contributions