# Bryce Boe



bbzbryce@gmail.com



linkedin.com/in/bryceboe



https://github.com/bboe

# Summary

I'm a Software Engineer and educator with extensive experience in building secure and scalable web services. Currently I work at AppFolio Inc., helping to improve the security of our customers' data from threats, both external and internal. Prior to that, I designed and implemented the scalable and cost-effective processes by which AppFolio generates and regularly regenerates thousands of machine learning models for automating accounts payable. Finally, as an educator I help students develop and strengthen their ability to build and deploy scalable Internet services.

# **Experience**



# Staff Software Engineer, Tech Lead

AppFolio, Inc.

Sep 2017 - Present (3 years 11 months +)

Presently I lead AppFolio's Application Software Security team whose mission is to make software improvements to better protect our customers' data from threats, both external and internal.

#### Notable projects:

- Reduce employee in-app access to sensitive customer data and optimize a number of internal processes to reduce the need for employees to handle sensitive data
- Enable and enforce 100% of our owner accounts to enroll in MFA
- Enable and enforce 100% of our property manager accounts with access to sensitive data to enroll in MFA

#### Prior projects:

- Architect and implement a scalable solution for performing live machine learning predictions against thousands of distinct models in a cost-effective manner
- Optimize and automate the ETL to machine learning model generation pipeline to significantly reduce cost in regularly generating thousands of models
- Co-orchestrate a department wide (I don't recommend) update of our codebase to Rails 6

Outside of these projects, I have a strong interest in improving productivity through automation or simplification. I've created a number of errbot plugins to improve efficiency in everyday tasks like ordering coffee to managing compute instances on Google Cloud.

# Adjunct Professor

**UC Santa Barbara** 

Sep 2015 - Present (5 years 11 months +)

As the instructor for CS291, Scalable Internet Services, a graduate-level course, I am responsible for helping students learn and develop the skills necessary to build modern scalable web services. Each offering of the course involves between 20 and 40 graduate students who, in groups of 4 to 5, build a scalable Ruby on Rails application. Through extensive load testing, their goal is to find and resolve

bottlenecks in order to exponentially increase both the number of concurrent users and the amount of data their web service handles. For more information about the course please see cs291.com.

Offerings: Winter 2021, Fall 2019, Fall 2018, Fall 2017, Fall 2016, Fall 2015 Next offering: Fall 2021



# Web Operations Consultant

WorldViz VR

Apr 2005 - Apr 2021 (16 years 1 month)

My ongoing responsibilities include:

- Am the sole devops supporting their Vizible Virtual Meeting room software since February 2020
- Maintain their AWS-based web server after suggesting and implementing the initial relocation of the web server and database to AWS around 2009

Over the years, I've worn a significant number of hats. I started in 2005 by developing in-house plugins for SugarCRM, then supporting their entire web presence. I redesigned and rebuilt their Internal network including Active Directory and Exchange server (I never want to do that again). I've supported their customers by developing custom Vizard scenes.



# Senior Software Engineer, Tech Lead

AppFolio, Inc.

Jan 2016 - Sep 2017 (1 year 9 months)

Developed Ropes, Appfolio's software engineer onboarding program. One purpose of Ropes was for new hires to develop excellent software development practices while working with many of our more experienced developers. Responsible for onboarding all 2016 software engineers through 6-10 weeks of Ropes. Lead 2017 Software Engineering Internship program.



# Senior Software Engineer

AppFolio, Inc.

Sep 2014 - Jan 2016 (1 year 5 months)

Worked on an agile product team to deliver significant improvements to an existing Work Orders feature and with the same team to provide an interface to AppFolio's Contact Center value added service.

Directed a team of four interns on an experimental project involving integration of Twilio's API and realtime push notifications into AppFolio Property Manager.

Instructed a graduate student course, CS290B Scalable Internet Services, at UCSB for the purposes of offering an applied course to those students, and secondly serving as a means of recruiting high quality students.

Led an effort to significantly improve our Engineering onboarding sessions. Following a pedagogical approach, this effort was focused on creating learning outcomes and prerequisites for each session in order for content to remain consistent across various session leaders. This effort led to the development of an extensive software engineer training program similar to Facebook's Bootcamp.



#### Graduate Student Researcher

UC Santa Barbara

Sep 2008 - Sep 2014 (6 years 1 month)

Studied the effects of automated feedback systems on student's learning in Computer Science classrooms as well as the application of similar tools to Scratch based curriculum in 4th through 6th grade classrooms.

### **Education**



#### UCSB UC Santa Barbara

Doctor of Philosophy (Ph.D.), Computer Science 2008 - 2014



#### UCSB UC Santa Barbara

Master of Science (M.S.), Computer Science



#### UCSB UC Santa Barbara

Bachelor of Science (B.S.), Computer Science 2004 - 2008

#### Skills

Python • Software Engineering • Ruby on Rails • Amazon Web Services (AWS) • Mentoring • Security • Scalability • Agile Methodologies • React • Empathy

# **Honors & Awards**



# Outstanding Computer Science Teaching Assistant Award - College of

Engineering, UCSB

Jun 2012

Award granted to one department TA for the entirety of the school year as selected by the students of the department.



# Outstanding Teaching Assistant Award - Academic Senate, UCSB

Apr 2011

Awarded to four teaching assistants selected among all nominated teaching assistants across all departments for the academic year. This award is the highest honors a teaching assistant can receive at UCSB.



# Outstanding Computer Science Teaching Assistant Award - College of

Engineering, UCSB

Jun 2009

Award granted to one department TA for the entirety of the school year as selected by the students of the department.