

# Justin Pearson's Résumé

See [justinppearson.com](http://justinppearson.com) for contact info, projects, and videos. For references, email me at [justin.pearson@gmail.com](mailto:justin.pearson@gmail.com).

## Industry Experience

- **Software Engineering Manager**, AppFolio, 2021 – present
  - Manage and advise several cross-functional product development teams.
  - Highly rated by direct reports and superiors.
- **Senior Software Engineer, Tech Lead**, AppFolio, 2018 – 2020
  - Designed and built web-based real-estate property management accounting software.
  - Led a cross-functional team of Software Engineers, a Product Manager, User Experience Designer, and Quality Assurance Engineer.
  - Prioritized simple, practical designs, pair programming, and quick, iterative delivery of customer value.
  - Tech stack: Ruby On Rails, React, Javascript, and MySQL.
- **Controls Engineer**, AeroVironment, 2008 – 2012
  - Worked on the Global Observer: a high-altitude, long-endurance prototype spyplane.
  - Designed and implemented control algorithms in embedded C/C++ code to control the spyplane's liquid-hydrogen power plant.
  - Deployed to Edwards Air Force Base for the 15-month flight-test campaign.
  - Debugged complex mechanical, electrical, and networked systems under time pressure.
  - Wrote data analysis tools in Matlab, Python, MySQL, and Bash.

## Education

- **Ph.D. in Electrical and Computer Engineering**, UC Santa Barbara, 2012 – 2017
  - PhD Thesis topic: Designing control systems under bandwidth and energy constraints.
  - Towbes Fellowship recipient, recognizing academically exceptional first-year graduate students.
  - *See website for PhD Dissertation video.*
- **M.S. in Mechanical Engineering**, Stanford University, 2006 – 2007
  - Emphasis: Control Systems • GPA 3.79/4.0
- **B.S. in Mechanical Engineering**, UC Santa Barbara, 2001 - 2006,
  - Highest Honors • GPA 3.99/4.0 Major, 3.91/4.0 Overall

## Teaching Experience

- **Certificate in College and University Teaching**, 2015
  - Companion program for PhD students to demonstrate superior competence and experience in teaching at the university or college level.
- **Instructor of Record**
  - *ENGR 3: Intro to Programming*, UC Santa Barbara, Summer 2015
  - *COMP 150: Object-Oriented Programming*, CSU Channel Islands, Spring 2016
- **Robotics Internship Mentor**
  - *School for Scientific Thought*, UC Santa Barbara, 2015
  - *Dos Pueblos High School Summer Robotics Internship*, UC Santa Barbara, 2015

## Fun

- **Presentations** (*See website for videos*)
  - *A program to play the "Set" card game*, AppFolio tech talk, 2018
  - *Tour of the Controls Lab at UC Santa Barbara*, 2017
  - *An Introduction to Mathematica and the Wolfram Language for Engineers*, 2016
  - *The Wide World of Control Engineering*, 2015
- **Projects** (*See website for code / docs*)
  - *Grumpy Justin's Ruby Tutorial*, personal project, 2020
  - *Shortest-path grocery shopping*, personal project, 2020
  - *The Smile Machine*, hack day project, 2017
  - *Load-testing a Rails app on AWS Elastic Beanstalk*, class project, 2017