

Justin Pearson's Résumé

[Personal website](#) • [Email](#) • [GitHub projects](#) • [YouTube videos](#) • [LinkedIn](#)

Industry Experience

- **Senior Software Engineer**, AppFolio, 2018 – 2020, 2025 – present
 - Designed and built web-based SaaS software for managing rental properties.
 - Tech Lead for a cross-functional product development team, mentoring junior engineers and setting technical direction.
 - Prioritized simple, practical designs, pair programming, and quick, iterative delivery of customer value.
 - Tech stack: Ruby On Rails, React, Javascript, Typescript, MySQL.
- **Software Engineering Manager**, AppFolio, 2021 – 2024
 - Managed 4–8 engineers across 1–3 agile cross-functional product development teams.
 - Collaborated with product managers and UX designers to align high-quality technical solutions with product / business goals.
 - Coached and mentored software engineers in their career growth and performance.
 - Grew our team through interviewing, hiring, and training engineering interviewers.
- **Control Systems 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 software 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. ([PDF](#), [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

Personal Projects

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