ANTHONY HEIN

anhein@princeton.edu — 732-977-4104 — github.com/AnthonyHein
linkedin.com/in/anthein57/ — anthonyhein.com

EDUCATION

PRINCETON UNIVERSITY (9/2018 - 6/2022)
GPA: 4.00 / 4.00
Major: Computer Science (CS)
Minor: Statistics and Machine Learning (SML)
Awards: Shapiro Prize for Academic Excellence
Coursework: Data Science, Linear Algebra,
                    Probability and Stochastic Systems

JFK MEMORIAL HS (9/2014 - 6/2018)
GPA: 4.33 / 4.33
Awards: Valedictorian, National AP Scholar,
               Student Body President, Mr. JFK
Coursework: Calculus, Statistics, Physics

TECHNICAL SKILLS

(descending familiarity)

PROGRAMMING LANGUAGES
Python • Java • C • Go • JavaScript • R • ARMv8

DESIGN / MARKUP
HTML5 • LaTeX • CSS3 • Bootstrap 4 • bulma.io

DATABASE MANAGEMENT TOOLS
SQLAlchemy • SQLite • PostgreSQL • MongoDB

WEB APPLICATION TOOLS
Flask • Jinja2 • Heroku • Express • Pug • AWS

MISCELLANEOUS
Microsoft Office • numpy • Pandas • Matplotlib

MEMBERSHIPS

THE DAILY PRINCETONIAN (7/2020 -)
Chief Technology Officer

Lead independent newspaper's tech team
in creation of beautiful websites, analytics
dashboard, and various internal tools.

PRINCETON PUZZLES (9/2018 -)
Treasurer

Raise and manage $6000 + company swag
annually to host Princeton Puzzle Hunt.

**PRINCETON COMMUNITY
PROJECTS STUDIO (9/2019 - 3/2020)**
Computing Mentor

Made weekly visits to nearby grade school
to help students of underrepresented
minorities learn computer science.

WORK EXPERIENCE

U.S. AIR FORCE (AF) KESSEL RUN LAB (6/2020 - 8/2020)
Software Engineering (SWE) Intern

Node.js • Visual Studio • Documentation • PostgreSQL • Legacy Software

- Configured team's development environment on cloud service.

- Researched COV19 effects on AF; presented findings and suggestions.

PRINCETON UNIV. COMPUTER SCIENCE DEPT (9/2019 - 6/2020)
Peer Tutor & Lab Teaching Assistant

Java • C • ARMv8 (Assembly Language) • Machine Language • Debug

- Assisted students in introductory programming courses to debug.

- Upheld responsibilities during COV19 pandemic through use of Zoom.

- Provided 1-on-1 on-call tutoring in Algorithms and Data Structures.

PRATT & WHITNEY (6/2019 - 8/2019)
Digital Technology Leadership Program Intern

Oracle PL/SQL • Automation • Workflow Software • Microsoft SSRS

- Set up real-time reporting on shop floor operations w/ Microsoft SSRS.

- Streamlined service requests with United Technologies Corp software.

- Wrote SQL scripts to transfer data from Excel to Oracle PL/SQL tables.

PROJECTS

(more details available on anthonyhein.com)

GIN RUMMY EAAI RESEARCH CHALLENGE (8/2020)
Python • Java • Reinforcement Learning (RL) • Research • Game Theory

- Wrote RL agent to play Gin Rummy and submitted accompanying write-up.

GAME21 (7/2020)
Go (Golang) • Reinforcement Learning (RL) • No 3rd-Party Code

- Implemented environment for simple two-player game and trained
  agent to play game using RL; learned optimal strategy in 10^6 games.

APSA MATCHER (6/2020)
Python • Google API Console • Healthcare • Code for URM • Automation

- Worked w/American Physician Scientists Association to match student
  underrepresented minorities to principal investigators for summer.

MEALQUEUE (4/2020)
Python • SQLAlchemy • Flask • Bootstrap • Project Management/Leader

- Led full stack development team to create three-tiered web application
  for online-ordering for Princeton University Dining Services program.

ZAGE OPERATIONAL TOOLS (5/2020)
Python • Google API Console • Automation • Startup • Client Relations

- Managed tools to reach/onboard businesses for new payment platform.