

# Cracking the Code





# Personal and Professional Development



# So, where do we begin?

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- Internships are great ways to **get exposure into a field or company you are interested and helps with getting your foot into the corporate world** (think post-college)
- Biggest key you can do is to **focus on your personal and professional brand**
- **Aim for underclassmen opportunities** 🎯
- Ways to **build your portfolio**
  - Side Projects
  - Research
  - Hackathons



# Some opportunities to check out!

**Look into Frosh/Soph Specific Programs like internships, research, externships**

- **UIUC PURE Research**
- **NCSA SPIN**
- **Anything @ Research Park**
- **Course Staff in CS classes**
- **RSOs**
- **Conferences/Conventions**
  - MLH
  - GHC
  - ThinkChicago Lollapalooza
- **Google**
  - STEP
  - Summer of Code
- **Meta University**
- **Microsoft**
  - Explore (SWE + PM)
  - New Technologist
- **Synchrony BLP**
- **Externships**

# Resume Advice

- Always use **black and white for your resume**. Blue is fine too. Any flashy color is a turn off - *Karen from HR will cringe*
- Make it on **Word Doc or LaTeX**
- **General Format to follow**
  - Header
  - Education
  - Experiences
  - Projects
  - Skills



## Jake Ryan

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### EDUCATION

<b>Southwestern University</b> <i>Bachelor of Arts in Computer Science, Minor in Business</i>	Georgetown, TX Aug. 2018 – May 2021
<b>Blinn College</b> <i>Associate's in Liberal Arts</i>	Bryan, TX Aug. 2014 – May 2018

### EXPERIENCE

<b>Undergraduate Research Assistant</b> <i>Texas A&amp;M University</i>	June 2020 – Present College Station, TX
<ul style="list-style-type: none"><li>• Developed a REST API using FastAPI and PostgreSQL to store data from learning management systems</li><li>• Developed a full-stack web application using Flask, React, PostgreSQL and Docker to analyze GitHub data</li><li>• Explored ways to visualize GitHub collaboration in a classroom setting</li></ul>	
<b>Information Technology Support Specialist</b> <i>Southwestern University</i>	Sep. 2018 – Present Georgetown, TX
<ul style="list-style-type: none"><li>• Communicate with managers to set up campus computers used on campus</li><li>• Assess and troubleshoot computer problems brought by students, faculty and staff</li><li>• Maintain upkeep of computers, classroom equipment, and 200 printers across campus</li></ul>	
<b>Artificial Intelligence Research Assistant</b> <i>Southwestern University</i>	May 2019 – July 2019 Georgetown, TX
<ul style="list-style-type: none"><li>• Explored methods to generate video game dungeons based off of <i>The Legend of Zelda</i></li><li>• Developed a game in Java to test the generated dungeons</li><li>• Contributed 50K+ lines of code to an established codebase via Git</li><li>• Conducted a human subject study to determine which video game dungeon generation technique is enjoyable</li><li>• Wrote an 8-page paper and gave multiple presentations on-campus</li><li>• Presented virtually to the World Conference on Computational Intelligence</li></ul>	

### PROJECTS

<b>Gitlytics</b>   <i>Python, Flask, React, PostgreSQL, Docker</i>	June 2020 – Present
<ul style="list-style-type: none"><li>• Developed a full-stack web application using with Flask serving a REST API with React as the frontend</li><li>• Implemented GitHub OAuth to get data from user's repositories</li><li>• Visualized GitHub data to show collaboration</li><li>• Used Celery and Redis for asynchronous tasks</li></ul>	
<b>Simple Paintball</b>   <i>Spigot API, Java, Maven, TravisCI, Git</i>	May 2018 – May 2020
<ul style="list-style-type: none"><li>• Developed a Minecraft server plugin to entertain kids during free time for a previous job</li><li>• Published plugin to websites gaining 2K+ downloads and an average 4.5/5-star review</li><li>• Implemented continuous delivery using TravisCI to build the plugin upon new a release</li><li>• Collaborated with Minecraft server administrators to suggest features and get feedback about the plugin</li></ul>	

### TECHNICAL SKILLS

**Languages:** Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, R  
**Frameworks:** React, Node.js, Flask, JUnit, WordPress, Material-UI, FastAPI  
**Developer Tools:** Git, Docker, TravisCI, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse  
**Libraries:** pandas, NumPy, Matplotlib



# Resume Advice

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## IMPORTANT NOTES:

- When you list relevant coursework, **DO NOT PUT IRRELEVANT COURSES**
  - *Karen from HR **DOES NOT CARE** if you took **BBQ Science** if you're applying for **SWE Internship***
  - *Karen from HR **DOES CARE** if you took **Data Structures** or **Systems Programming***
- Make sure everything is relevant and **QUANTIFY IMPACT** and **SPECIFY TOOLS** where possible
- Use Word Doc or LaTeX (run thru ATS)
- Save file as **"YourName LastName Resume".pdf**



## EDUCATION

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**University of Illinois at Urbana-Champaign**  
B.S. Applied Mathematics

*Expected Dec. 2023*  
**GPA: 3.93/4.00**

## WORK EXPERIENCE

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**Ameren**  
*Data Scientist*

Champaign, IL  
*May 2022 - Present*

- Instructed a team of 3 interns to conduct research into load monitoring and collect data with Python and SQL
- Created multiple SQL queries enabling efficient retrieval of over **200,000** customer records and user profiles
- Constructed various workshops to teach new Python skills such as scikit-learn and Tensorflow to other interns

**How does our resume look like?**



**you + online**





# LinkedIn Advice

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- Think of it as your **resume but on social media**
- **Include any activities, experiences, awards, projects, etc** on there that you feel are relevant that won't be able to fit into your resume
- ***Make custom linkedin url***
- What you *should* really focus on putting out there
  - The Headline
  - Experience
  - Education
    - **Only put UIUC, not your HS**
  - Projects or anything that speaks best to you (research, article you wrote, etc)





# Custom LinkedIn URLs




## Edit your custom URL

Personalize the URL for your profile.

[www.linkedin.com/in/davidzan](http://www.linkedin.com/in/davidzan)



See prior custom URLs that might be linked to you 

**Assigned URL cannot be changed.**

[www.linkedin.com/in/david-an-477178106](http://www.linkedin.com/in/david-an-477178106)



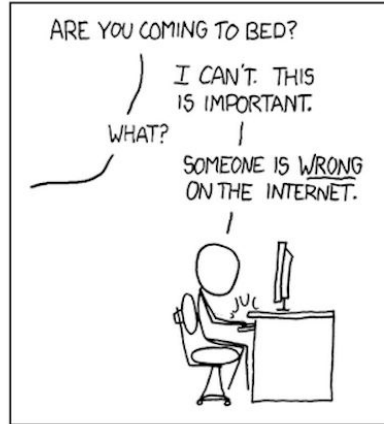


**you + running**



# On empathy and being yourself

- You are your **own** advocate
  - Basically, you are your own billboard and advertising
- Empathy is an underrated tool
- Succeeding in any environment: **Humble, Hungry, and Smart**





# Career Fair Battleplans

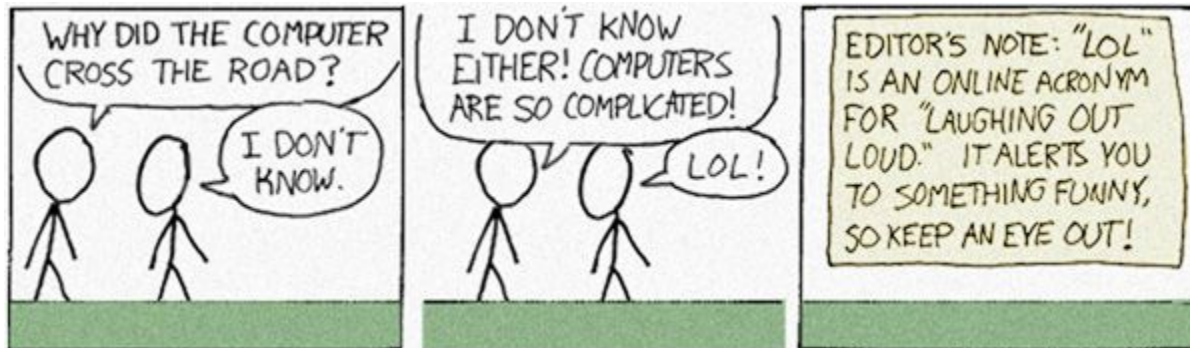
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- How do you make yourself stand out from the crowd
  - Keep memorable conversations and follow up effectively
  - Great way to brush up on your elevator pitch
  - Try to scope out companies before hand and target those, use other ones you aren't interested in as practice
  - How can **you** stand out from everyone else applying and talking to



# The momentum of **running**

- College is a great place (we all know that)
- You get many opportunities thrown at you
  - Take any opportunity and **run** with it
- The momentum of flywheels





# Links:

RP Guide: <https://bit.ly/rp-guide22>

Links to Campus Resources: <https://bit.ly/uiuc-links>



# Thank You!

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**Connect with me!!**