

Bailey A. Tincher

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Education:

University of Illinois at Urbana-Champaign

3.82 / 4.0 GPA

- Bachelor of Science in Computer Science
- Minors in Quantum Physics and Mathematics
- **Relevant Courses:** Artificial Intelligence, Machine Learning, Data Structures, Web Programming, Algorithms, Systems Programming

Aug. 2017 - May 2021

Skills:

- **Advanced:** Node.js, Python, AWS Serverless, REST API's, Public Speaking, Initiative
- **Proficient:** C/C++, Java, SciPy libraries, React.js, NoSQL, Linux, Git, Least-Privileged Security, Agile
- **Familiar:** CI/CD, Tensor Flow, OAuth 2.0, Open-Source Development
- **Achievements:** AWS Certified Cloud Practitioner | Eagle Scout | Dean's List

Projects:

QUIUC - Undergraduate Quantum Computing at Illinois

<https://www.quiuc.org>

Founder and President

Mar. 2019 - Present

- Started the first undergraduate quantum computing organization of over 125 students, where we teach open-source workshops, team up on research projects, and maintain a talent pipeline to academia and industry
- Designed an N-slit diffraction simulation web app for the Physics department to aid in teaching quantum mechanics

Association of Data Science and Analytics (ADSA)

<https://adsa.cs.illinois.edu>

President

Aug. 2019 - Present

Advanced Workshops Committee Member

Aug. 2017 - Present

- Teaching machine learning workshops to over 50 students every week to build up undergraduates on campus with the skills to collaborate on future team projects
- Implemented a Markov Chain Tweet generator in Python that web scraped Tweets and accepted a text sentiment bias
- Partnering with the College of Business to host a sports datathon in Spring 2020 to expose athletic coaches to big data

Overheard App

Champaign, IL

AWS Backend Developer

Apr. 2019 - Present

- Establishing a new social media app "Overheard", offering a map-centric view of nearby activity and amusing conversation
- Architecting decoupled, RESTful micro-services with the Serverless Framework, Lambda, Dynamo DB, and Elasti-Cache
- Monetizing our platform through targeted, non-intrusive ads that integrate natively into the app's map as posts

Work Experience:

State Farm Research and Development Center - Fortune 50 Company

Champaign, IL

Software Engineering Intern - Full Time

May 2019 - Aug. 2019

- Executive's Choice Winner of the 2019 State Farm Hack Day across 1000+ developers company wide, leading a small team as the full stack developer on a computer vision project to improve customer data entry at the scene of an accident
- Constructed an automated, enterprise-level dashboard of 100+ AWS accounts that aggregated AWS Trusted Advisor data into an SQS queue, processed it concurrently in Lambda, and then presented it in Quick Sight
- Integrated a full stack voice app in under 12 weeks that simplified the filing process of 40k+ claims/day, pitched the concept to a corporate executive, and sought out risk management and security teams to bring it near production

University of Illinois - Department of Computer Science

Champaign, IL

CS 125 Course Developer - Part Time

Jan. 2018 - Present

- Advancing CS education for a course of 900+ students by creating innovative tools in a start-up like environment
- Creating a lecture slide PWA in React.js with a Socket.io backend allowing collaborative editing and participation tracking

Illinois Tool Works (ITW) - Fortune 200 Company

Chicago, IL

Data Analytics Intern - Full Time

May 2017 - Jan. 2019

- Worked directly with the VP/GM on a data-driven, "Front-to-Back" 100,000 square foot plant redesign leveraging Python to optimize the part picking workflow at a scale of 500,000 picks per year
- Collaborated with the product management and supply chain teams to conduct an 80/20 analysis in Python across 40,000 parts and \$100M+ in sales to eliminate underutilized inventory and identify supply chain complexity