

Karan Sodhi

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Education

University of Illinois at Urbana-Champaign
Bachelor of Science in Computer Science

December 2022
Champaign, Illinois

- **GPA:** 4.00 / 4.00
- **Current Coursework:** Data Structures, Computer Architecture, Numerical Methods
- **Completed Coursework:** Software Design Studio, Intro to Computer Science, Honors Computer Science, Intro to Kotlin, Discrete Structures, Linear Algebra, Calculus III

Experience

NetJets

June 2020 – Aug. 2020

Software Engineering Intern, Crew Innovation Lab

Columbus, Ohio

- Automated identifying and updating discrepancies between passport data scanned from the crew's mobile app during flight boarding and what was stored in the database. Resulted in hours of saved labor and improved data accuracy by up to 25%
- Updated the app's back-end architecture using Grails, Groovy, and Java to accept, parse, and model scanned passport data sent by the client. Wrote robust unit tests for all of the new features implemented
- Practiced Agile and Scrum in 2 week sprints and contributed in daily stand-ups, code reviews, and design workshops

Projects

OCR++

Apr. 2020 – May 2020

Desktop App

- Utilized C++ and Cinder to build an app that transcribes handwritten text live from a webcam or from an image file
- Developed a k-nearest neighbors algorithm using over 10,000 training images to classify text with an accuracy of 89%
- Processed images and extracted individual letters and numbers from pieces of text using OpenCV
- Designed a simple to use UI using ImGui to overlay the predicted text on top of the original image

Gen Ed Finder

Nov. 2019 – Dec. 2019

Android App

- Built an app in Java that helps students find classes they need to graduate or classes similar to ones that they have enjoyed
- Discovered similarities between classes using the Python machine learning library scikit-learn
- Created a REST API using Python and Flask to return the results of the similarity model to the app and deployed it on AWS

Secure and Sure

Aug. 2019 – Dec. 2019

Web App

- Collaborated with a team of 6 to design a web app that securely stores ID documents for retrieval online
- Parsed IDs using Azure computer vision so users could easily enter their information on government assistance forms
- Secured data by using a combination of RSA and XOR encryption to encrypt the image file and parsed contents
- Created the UI with React, stored user info in Firebase, and deployed with Netlify

Skills

Programming Java, Python, C++, Groovy, Kotlin, Android Development

Tools & Technologies Git, Flask, Grails, OpenCV, Scikit-learn, Firebase, AWS, Jira

Honors & Awards

James Scholar, Grainger College of Engineering

2020

Candidate, U.S. Presidential Scholar

2019

Featured Project, CS 125 Project Fair

2019

Finalist, JPMorgan Code For Good Challenge

2018