Dinesh Karnati

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EDUCATION

North Carolina State University

Raleigh, North Carolina

Bachelor's of Science in Computer Science

Expected Graduation May 2026

- **GPA:** 4.00/4.00, Dean's List
- Related Coursework: Data Structures & Algorithms, Intro to Artificial Intelligence, Natural Language Processing,
 Software Engineering, C/Software Tools, Operating Systems

EXPERIENCE

Vandal Search

Remote

Software Development Engineering Intern

Aug 2022 - Apr 2023

- Overhauled the existing UI design using Material-UI, Next.js, and CSS/HTML, leading to a 50% increase in user satisfaction and a 30% boost in user engagement based on internal feedback testing. Developed new webpages, including the Early Bird landing page, incorporating React hooks.
- Gained expertise in web scraping and database management by collaborating directly with my team lead on MongoDB, developing logic for schema design and database management.

InPrintAI Remote

Software Development Engineering Extern

Aug 2022 - Oct 2022

- Gained exposure to Python computer vision libraries such as Deepface Live and DeepFake Lab, as well as REST APIs and SQL databases, by exploring their functionalities and developing logic for the project.
- Contributed to the initial web page development, designing functionalities for the login/signup pages and landing page, which accelerated the project timeline by 10%.

PROJECTS

GridMaster | gridmaster.pro | Repository

Fuguay-Varina, North Carolina

Lead Engineer

June 2024 - July 2024

- Designed a website that predicts Formula 1 race outcomes and recommends the best Fantasy F1 team with up to 68% accuracy, as determined by the sklearn library, utilizing React.js for the frontend and a Python backend with a Flask server.
- Trained an XGBoost classifier model using race data from the past 25 years, scraping the data with BeautifulSoup4 and optimizing model performance with GridSearchCV.
- Developed a greedy algorithm to select the Fantasy team and implemented PostgreSQL and MongoDB databases for user authentication and race data storage.

PlatePal | Repository

Fuquay-Varina, North Carolina

Lead Engineer

Aug 2024 – present

- Designing an application that scrapes daily menu data from NCSU dining halls using Selenium, providing users with an
 optimal meal plan based on their dietary specifications.
- Utilized Linear Programming with the PuLP Python library to select the best combination of food items, employed
 Cosine Similarity for initial recommendations, and implemented a Neural Network with Keras to refine
 recommendations through a user feedback loop.

SKILLS

Languages: Java, Python, JavaScript, HTML/CSS, Next.js, React.js, Node.js, C, .NET, R

Frameworks & Databases: Bootstrap, Flask, Django, Tailwind, Material-UI, MongoDB, PostgreSQL,

Tools: PyCharm, Eclipse, VS Code, VIM, APIs, Android Studio, Jupyter

Cloud & DevOps: Git, Unix, Jenkins, AWS (EC2, LightSail, ACM, Route 53, S3)