

ADITHI DEBORAH CHAKRAVARTHY

+1(402) 999-3200 ♦ Omaha, NE

adithi.deborah@gmail.com ♦ [linkedin.com/in/adithideborah](https://www.linkedin.com/in/adithideborah) ♦ adithideborah.github.io

OBJECTIVE

Dynamic and results-oriented professional with over 5 years of experience in the field of artificial intelligence and machine learning. Adept at developing innovative algorithms and solutions to address complex challenges in diverse industries. Ready to bring creativity, expertise, and a passion for innovation to your organization.

SKILLS

Programming	Python, Java, Matlab, R, SQL, React.JS, HTML, CSS, JavaScript
DevOps and Cloud	CI/CD, AWS, Docker
Tools	Git/GitHub, JIRA, Postman
Frameworks	Flask/Fast APIs, Dash, OpenCV, PyTorch, TensorFlow, Keras, scikit-image

EXPERIENCE

AI Developer Guardian RFID	May 2021 - Feb 2024 <i>Maple Grove, MN</i>
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- Spearheaded end-to-end research and development of machine learning models using Python, Flask/Fast APIs, MS SQL, and Docker, resulting in streamlined production timelines and optimized development workflows.
- Implemented rigorous CI/CD testing and comprehensive bench-marking strategies, leading to significant improvements in deployment efficiency, model reliability, and performance, surpassing industry standards.

Full Stack Developer Intern PayPal	May 2020 - Aug 2020 <i>Omaha, NE</i>
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- Designed and deployed a high-impact Analytics dashboard using Python, Dash, and Oracle DB, processing and analyzing data with improved rendering speed, providing actionable insights for informed decision-making.
- Developed and implemented an Operational dashboard using JavaScript, React.JS, and MS SQL, leading to enhanced tracking of developer allocation and shrinkage, optimizing resource management and project delivery.

Instructor University of Nebraska at Omaha	Aug 2017 - May 2021 <i>Omaha, NE</i>
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- Led instruction for Web Development using HTML, CSS, JavaScript, boosting student engagement using interactive projects.
- Assisted in instructing Computer Science II using Java, contributing to a significant enhancement in coding proficiency.

EDUCATION

Ph.D in Information Technology , University of Nebraska at Omaha GPA: 3.9	2016 - 2021
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M.Sc in Artificial Intelligence , University of Southampton GPA: 3.9	2011 - 2012
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B.E in Computer Science and Engineering , Anna University GPA: 3.7	2007 - 2011
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PROJECTS

Facial Recognition System. Developed and implemented a patent-pending deep learning-based facial recognition system achieving 92% accuracy, enhancing security measures in a correctional facility.
Technologies Used: PyTorch, Flask, Dlib, MS SQL.

Scoring Algorithm for Officer Rounds. Engineered and patented an innovative machine learning-driven scoring algorithm, improving officer rounds' efficiency by 20% in a correctional setting.

Technologies Used: Jupyter, Scikit-learn, MS SQL

Object and Inmate Tracking System. Designed and deployed a real-time tracking system using computer vision, resulting in a 27% reduction in incidents, improving safety protocols within the correctional facility, with a patent pending.

Technologies Used: Tensorflow, Keras, Fast API, MS SQL

CERTIFICATIONS

- [Introduction to Machine Learning on AWS](#)
- [AWS Certified Cloud Practitioner](#)

SELECT PUBLICATIONS

- [1] Adithi D Chakravarthy et al. "Towards automated distortion and health correlation for age-related macular degeneration". In: *2017 IEEE 17th International Conference on Bioinformatics and Bioengineering (BIBE)*. IEEE. 2017, pp. 486–491.
- [2] Adithi D Chakravarthy et al. "Predictive models with resampling: A comparative study of machine learning algorithms and their performances on handling imbalanced datasets". In: *2019 18th IEEE International Conference On Machine Learning And Applications (ICMLA)*. IEEE. 2019, pp. 1492–1495.
- [3] Adithi Deborah Chakravarthy et al. "An approach towards automatic detection of toxoplasmosis using fundus images". In: *2019 IEEE 19th International Conference on Bioinformatics and Bioengineering (BIBE)*. IEEE. 2019, pp. 710–717.
- [4] Adithi D Chakravarthy et al. "A thrifty annotation generation approach for semantic segmentation of biofilms". In: *2020 IEEE 20th International Conference on Bioinformatics and Bioengineering (BIBE)*. IEEE. 2020, pp. 602–607.
- [5] Adithi D Chakravarthy et al. "Semantic image segmentation using scant pixel annotations". In: *Machine Learning and Knowledge Extraction* 4.3 (2022), pp. 621–640.