Aadithya R. Anumala

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EDUCATION

University of Illinois at Urbana–Champaign (UIUC)

- Bachelor of Science: Computer Science and Chemistry, GPA: 3.88. UIUC ranked top 5 in US for CS and Chem.
- James Scholar Honors Program (Top 10%), Dean's List, Artificial Intelligence SIG, HackIllinois, ACM

Foothill and De Anza College

• Concurrent Enrollment, Computer Science, GPA: 4.00

Relevant Coursework (underlines in progress)

Algorithms • *Artificial Intelligence* • *Intro Deep Learning* • *Data Structures* • *Discrete Structures* • *Stat Analysis* Computer Architecture • Organic Chemistry • Accelerated Chemistry I & II • Advanced Java Programming **IBM AI Engineering Professional Certificate** (Coursera) Conferred July 2020

ML in *Python* • *SparkML* • *Keras Deep Learning* • *DNN* in *PyTorch* • *Deep Learning with TensorFlow*

PROJECTS

Zoom Matchmaking

July 2020 - August 2020

Expected May 2022

May 2018 – July 2019

Led a team of 6 people to apply machine learning, natural language processing, and React to a tool that intelligently assigns students to breakout rooms on Zoom for classrooms and discussions. Competed in HackThis by HackIllinois. **Chemotherapy Enhancement** April 2016 - May 2018

Applied machine learning and Rosetta computational analysis of protein structure to determine effects of tp73 on cisplatin chemotherapy in cancer cells. Improved treatment by 33%. 1st place in 2017 and 2018 Intel ISEF Affiliate.

Hemorrhagic Stroke Research

Improved hemorrhage stroke patients' survival rate by 26% by building computational and mechanical models of en route emergency procedures. 3rd Place in 2016 Intel ISEF Affiliate.

EXPERIENCE

UIUC CS Dept. | CS 173 (Discrete Structures) Course Assistant

Designed and coordinated online class structure and content, running discussions and office hours. Taught computer science students mathematical theory, propositional logic, and proof-writing techniques, such as induction.

Frore Systems

R&D + SWE Intern

Improved time efficiency by 28% through Bayesian networks in PyTorch for building a light refraction interpreting tool. Developed an automated pipeline system in wet lab which churned samples at a 56% faster rate. Created a novel cleaning process (40% faster and 20% less defective). Created and managed database of piezo inventory (10^7 items). December 2019 - January 2020

R&D Intern

R&D Intern

Conducted and improved thermal characterization lab procedures to safely assemble and automate flexible MEMS devices for heat dissipation used in the Consumer Electronics Show in Las Vegas. Developed and tested methods to coat piezoelectric materials on stainless steel substrates using RTP, spin-coat, and die-coat process lab techniques.

Genetic Foresight | **Research and Software Intern**

Developed the website using *JavaScript and SQL* tools for easy patient data acquisition and storage with integration to ensure dynamic analysis of patient trends in DNA for medicines like cisplatin and anastrozole.

Valkyrie Robotics | Director of Mechanical Engineering

Coordinated design, fabrication, and assembly of large electromechanical devices. Used SolidWorks and C++ for design and function. Received Runner-Up at Capital City Classic in 2016, while serving as Operator.

SKILLS

Technical Java • Python • C++ • PyTorch • Keras • JavaScript • Verilog • TensorFlow • Wolfram • MIPS • HTML/CSS • R • SQL • Linux shell • Git • Jupyter Notebook • JetBrains • RStudio • (Languages & Frameworks) Apache Tomcat

March 2015 - April 2016

August 2020 - Present

June 2020 - August 2020

June 2019 - August 2019

June 2018 - July 2018

May 2017 - May 2018