Aadithya R. Anumala

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EDUCATION

University of Illinois at Urbana–Champaign Expected May 2022

- *Bachelor of Science: Computer Science and Chemistry, GPA: 3.88*
- *James Scholar Honors Program (Top 10%), Dean's List, Artificial Intelligence SIG, HackIllinois, ACM*

Foothill and De Anza College May 2018 – July 2019

- *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

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 March 2015 - April 2016

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

Frore Systems

R&D + SWE Intern June 2020 - August 2020

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).

R&D Intern December 2019 - January 2020

R&D Intern June 2019 - August 2019

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 June 2018 - July 2018

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 May 2017 - May 2018

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 (Languages & Frameworks)	Java • Python • C++ • Swift • JavaScript • Verilog • TensorFlow • Wolfram • MIPS • HTML/CSS • LaTeX • R • SQL • JSP • Rosetta • COMSOL • SolidWorks • MATLAB • Ansys • Linux shell • Git • Jupyter Notebook • JetBrains • NetBeans • IDLE • RStudio • Apache Tomcat
Laboratory	Procedures: DNA Restriction Analysis • ELISA • Spin-Coating • Die-Coating • Bacterial Transformation • Yeast Conjugation • Agarose Gel Electrophoresis • Spectrophotometer • Scanning Probe Microscopes