

Education

University of Illinois Urbana-Champaign Aug 2022 - May 2025

B.S. in **Computer Science**, Grainger College of Engineering (GPA: 4.0)

- **Computer Science Coursework:** Introduction to Computer Science II, Introduction to Discrete Structures, Software Development Lab, Data Structures, Computer Architecture, Numerical Methods, Probability & Statistics
 - **Math Coursework:** Number Theory, Linear and Abstract Algebra, Complex Analysis, Vector & Tensor Analysis
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Experience

Software Engineer Intern at Fermi National Accelerator Laboratory Aug 2020 - Jun 2022, Batavia IL, USA

- Filtered through signal and background events with a 98.2% efficiency with a DNN using TMVA framework
- Wrote, updated, and maintained CMS software packages in C++ to handle specific jobs such as tracking inventory, storing and retrieving data, and controlling other equipment in a WSL environment
- Processed over 26,000 PYTHIA-generated particle interactions by working with group's data handling software
- Reported experimental results by publishing paper for arXiv and by presenting information at IMSAloquium

Full-Stack Developer at Kridagild Jun 2020 - Aug 2020, Aurora IL, USA

- Designed and implemented company website interface and system to enable ease of use
 - Developed backend software to run the website and its functionality and to keep our services up at all times
 - Managed a user database run on a Google Cloud Platform server to enable far-reaching access
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Projects

Syllabus Plus Website

- Worked as a full-stack developer with a team of 6 to create a site containing information on course offerings
- Enabled student access to over 160 course syllabi by implementing a course search feature
- Provided course recommendations based on 600 students' experiences by implementing a Random Forest regressor

Number Sequence Generator

- Built an LSTM neural net from scratch using C# .net to predict the next 10 numbers in a sequence of user inputs
- Developed class for supervised perceptron and gradient descent optimizer to hone in on desired set of weights
- Employed tabulation and least squares regression to predict values based on most recent inputs
- Answered correctly for standard and irregular sequences (linear, quadratic, recursive, exponential, trigonometric)

Facial Image Classifier

- Headed small team to create convolutional neural network with TensorFlow that processed 27,000 images of people
 - Decomposed images into RGB pixels and applied PCA to classify image age, gender, and ethnicity with 89% accuracy
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Extracurriculars

ACM | SIGPwny

- Learned about key concepts and current technologies surrounding cybersecurity over 4 months
- Participated in weekly coding challenges to gain hands-on experience with the field

Table Tennis President

- Chartered high school club of 90 people and led a team of 12 players in regional tournaments
 - Recruited, gave talks, and screened/interviewed 30 team members
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Relevant Skills

- **Technical Skills:** Python, Java, C++, C#, SQLite, Flask, Node.js, HTML, CSS, Linux/Command Line, Machine Learning, Algorithmic Design, Data Structures, Quantum Computing, Mathematics | **Languages:** English, Telugu, Russian
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