Arth Shukla

Redwood City, CA | https://arth.website | https://www.linkedin.com/in/arth-shukla/ | (650) 850 9097 | arthshukla03@gmail.com

EDUCATION

University of California, San Diego　　　　　　　　　　　　　　　September 2021 - June 2025
Bachelor of Science in Mathematics-Computer Science　　　　　　　　　　　　　　GPA - 4.0
Sequoia High School　　　　　　　　　　　　　　　　　　　　　August 2017 - June 2021
IB Diploma Recipient, Honor Roll, Track & Field, Cross Country, Model UN, Debate Team　　GPA - 4.6
Relevant Coursework -
Completed: Advanced Data Structures, Optimizations for Data Science I, Computer Organization and Systems Programming, Data Structures and Object-Oriented Design, Computer Science and Object-Oriented Programming - Java, Networks and Digital Communications, Data Warehousing to Big Data, Enumerative Combinatorics, Abstract Algebra I, Statistical Methods and Probability, Linear Algebra, Multivariable Calculus, Vector Calculus, Differential Equations
Ongoing in Winter 2022: Design and Analysis of Algorithms, Optimizations for Data Science II, Modern Algebra II, Synthesis II

EXPERIENCE

Bittner Development Co.
Bittner Development Group is an education technology company which creates interactives and products for clients like Norton, Barnes and Noble, SparkNotes, Thames and Hudson, and more.
Technologies Used: Web Development: React, SCSS, Node.js; DevOps: GitLab, Git, WSL; Scripting and Automation: TypeScript, JavaScript, Java; Development Standards: Web Content Accessibility Guidelines (WCAG) 2.1 AAA, Aria Authoring Practices Guide (APG), Norton Design System; Processes: Agile Methodology
Software Developer　　　　　　　　　　　　　　　　　　　　　　August 2022 - Present
- Develop component library and enterprise web application 'Interactive Builder' using React and SCSS
- Manage DevOps and CI/CD pipeline using GitLab
- Continue roles from Software Engineering Intern position

Software Engineering Intern　　　　　　　　　　　　　　　　January 2021 - August 2022
- Web development, QA, and devops of over 10 education interactive projects in React
- Manage and train two interns to complete projects using React and SCSS, GitLab, Git, and WSL
- Code projects in compliance of web content accessibility with WCAG
- Propose, lead, and develop internal and for-client automation projects using Node and native JavaScript

Media Group Intern　　　　　　　　　　　　　　　　　　November 2019 - January 2021
- Code questions into over 15 textbooks on Norton's online textbook platform, PCAT, using HTML
- Independent project involving automation of over 10 spreadsheet and data entry tasks using Java improving efficiency by over 90%

Personal Web Development Projects: **https://github.com/arth-shukla**
Technologies Used: Web Development: TypeScript, React, Storybook, SCSS; DevOps: Netlify, Git, GitHub Pages, GitHub Packages; Development Standards: Web Content Accessibility Guidelines (WCAG) 2.1, Aria Authoring Practices Guide (APG)
Independent Developer　　　　　　　　　　　　　　　　　　　January 2022 - Present
- Create personal website using React Typescript, SCSS, and Material UI, accessible by WCAG 2.1 AA standard, and publish to custom domain using Netlify: https://arth.website
- Code mobile-compatible Dice Roller web app with React and SCSS, accessible by WCAG 2.1 AA standards and publish to GitHub Pages: https://arth-shukla.github.io/dice-roller
- Create Icon Library with React TypeScript and SCSS, publish to GitHub packages: https://github.com/arth-shukla/my-icons; code demos and documentation published on GitHub Pages: https://arth-shukla.github.io/my-icons-documentation

ACM AI UCSD

ACM AI is UCSD's largest AI student org which fosters a community for those interested in AI and research.

Technologies Used: Element.AI: Python, Conda, Java, Maven, OpenAI Gym, PettingZoo, PyGame, Jackson, Squid, Bash; AI/ML Workshops and Projects: Python, PyTorch, TensorFlow, Google Colab; Web Development: TypeScript, React, LESS

Element.AI Competition — Lead Environment Development   July 2022 - Feb 2023
- GitHub (open to public): https://github.com/acmucsd/Element.AI
- Use Python with Conda and PettngZoo ParrallelEnv to create multi-agent gym environment as the core game the participants' bots solved
- Use Java with Maven and Jackson to create Java sdk for 45 participants (~22.5% of all participants)
- In coordination with IT, use Squid proxy, IPTables and bash scripts to create instructor tools, allowing us to enable/revoke access to wifi, whitelist sites, enable/revoke access to files, and in general control the competition accounts with granularity, both targeted and en masse
- Write proposals and attend meetings to obtain $8000 in sponsorships, attracting 200 participants (limited primarily by the number of UCSD linux lab machines) with hundreds of submissions

Board – Director of Events   May 2022 - Present
- Lead team of 7 event leads in creation of competitions, workshops, and socials related to ML/AI
- Coordinate with marketing and development teams to market events and create competitions

Board – Developer   April 2022 - Present
- Front-end website and AI competition development using React and TypeScript and LESS for ACM AI
- Develop component library, create and alter pages, and manage issues/pull requests on GitHub

Board – Event Lead   January 2022 - May 2022
- Ideate, create, and host workshops on NLP, deep learning, and ML topics
- Develop and organize competitions run by ACM AI (100-200 submissions on average)
- Coordinate with different parts of ACM AI Board (marketing, social, and other event leads) to host workshops and social events
- Mentor intermediate and beginner ACM Projects teams in developing AI/ML projects
- Promote Diversity, Equity, and Inclusion by planning URM-focuses events, implementing inclusive Discord server management, and working to make AI more accessible

Machine Learning Engineer   September 2021 - January 2022
- Create model to convert human faces to Cat-Human hybrid using DCGAN, PatchGAN, CycleGAN, and StyleGAN
- Coordinate with team of 3 front- and back-end devs to implement model into user-friendly tool

SKILLS

- **Programming Languages** - TypeScript, JavaScript, Node, React, Java, Python, Ruby, Bash, SCSS, LESS, HTML5 and CSS3, C, C++, R
- **Programs and Software** - Git, GitHub, GitLab, Visual Studio Code, Conda, Maven, WSL, Storybook, Android Studio, Matlab, Microsoft Office, Microsoft Excel, Microsoft Powerpoint
- **Languages** - Fluent in English and French, Spoken Hindi

ACTIVITIES & LEADERSHIP

Inspirit AI and Summer Stem Institute 2020
Program Participant and Inspirit AI End-of-Program Project Lead - Learn AI Fundamentals (neural nets and backprop, computer vision,etc) and develop model to identify pro- and anti-refugee tweets using sentiment analysis