ALEXANDER FICK

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EDUCATION

Dartmouth College, Hanover, NH   **September 2021 – June 2025**
Bachelor of Arts, Major in Computer Science, Minors in Human Centered Design, Minor in Statistics   **GPA 3.94/4.0**
Relevant Courses: Software Design & Implementation*, Problem Solving via Object Oriented Programming, Machine Learning & Statistical Analysis*, Data Visualization*, Discrete Mathematics*, Principles of Robot Design/Programming*, Intro to UI/UX Design*, Full-Stack Web Development*
Honors: Citations for meritorious performance in * starred courses

Aquincum Institute of Technology, Budapest, Hungary   **September – December 2023**
Courses: Algorithms & Data Structures, Mobile Development, Combinatorial Optimization, Design Workshop

PROFESSIONAL EXPERIENCE

PayPal, San Jose, CA   **June 2024 – September 2024**
Software Engineering Intern, Privacy
- Designed, developed, & integrated an internal REST API in Java Spring Boots that returns the requests to an API that share specific sensitive user information or cookies
- Exposed and fixed critical issues with incorrect identification of sensitive information being shared by PayPal APIs

Avronna Inc., Remote   **January 2024 – Present**
AI Gigalaboratory Design Intern
- Designed the content and visual appearance of slide decks for investor pitches, and presented a section of those to investors

Dartmouth College, Hanover, NH   **January 2024 – March 2024**
Teaching Assistant, Algorithms
- Held weekly office hours and provided support at problem-solving sessions to help individuals learn material
- Helped revise course structure and contents, and provided feedback based on student performance

Dartmouth College, Hanover, NH   **November 2022 – August 2023**
NLP Deep Learning Research Assistant, Professor Soroush Vosoughi
- Investigated the efficacy of using large language models for analyzing different language expression behaviors across cultures
- Assembled Python scripts to query LLMs and collect speech analysis data by culture using Reddit, Twitter, and Quora data

FacilityConneX, Nashua, NH   **June 2022 – August 2022**
Software Engineering and Data Science Intern
- Worked across the tech stack to develop new feature enabling user-configured data analytics in Python, TypeScript, & JavaScript
  - Developed backend REST API to integrate the user interface into the expression processing engine
  - Integrated distributed databases to build data payloads for expression processing engine to calculate the configured analytic
  - Developed Ts.ED backend application that worked with relational databases like Redis and Microsoft SQL server to efficiently insert, update, store, and delete expression data in relational databases based on user inputs
  - Implemented FastAPI application in Python to handle expression validation and evaluation by leveraging Pandas tools
- Maintained data analytics accessed by 500+ monthly users, collaborating on migration of data analytics from C# to Python code

LEADERSHIP

Dartmouth Technology Consulting Group, Hanover, NH   **September 2021 - Present**
President
- Directed data science and software development projects for international startups, hosted industry workshops for > 60 members
  KULLA – Project Manager (Winter-Spring 2023)
  - Integrated AWS platforms like S3 buckets to host the website and data for conversions of 2D blueprints to 3D blueprints, AWS Lambda for running the Python conversion script, and API Gateway for sending data between the client and server
  Bimmatch – Project Manager (Fall 2022)
  - Managed a team to enhance an Autodesk Revit plguin by matching construction materials to architectural blueprints
  Insighting.io – Software Developer (Spring 2022)
  - Leveraged ML clustering algorithms in Python to help companies target their marketing efforts & increase profit margins

Dartmouth Pain Train Ultimate Frisbee Team, Hanover, NH   **September 2021 – Present**
Captain, former Logistics Coordinator
- Designed and managed practice, tournament, roster, travel and budget plans of a 26-person team

PROJECTS & SKILLS

- **Hunt Game:** Full-stack website for creating, sharing, and playing treasure-hunt style games (what we call hunts)
- **Pixel Pulse:** A photography-focused social mobile app, leveraging key firebase technologies for data storage
- **Amazon Product Rating Classifier:** Classified product ratings based on user reviews with ML algorithms and text vectorization
- **Blackjack Game:** Implemented an autonomous dealer and player which learned optimal player strategy via reinforcement learning, can be played in a command line GUI over a TCP/IP connection
- **Languages:** Python, Java, JavaScript, C, R, Kotlin, TypeScript **| Technologies:** VSCode, IntelliJ, Figma, Bash, Unix, Git, Jira