AAYUSHKUMAR

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San Jose, CA - U.S. Citizen

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY
B.S. in Computer Science: Intelligence & HCI Threads - 3.83 GPA
ATLANTA, GA • GRADUATING DEC 2018

EXPERIENCE

YAHOO: TRIPOD PROJECT
Tripod Engineering Intern
SAN FRANCISCO, CA • MAY 2017 - AUG 2017

Yahoo's platform for commoditized photo & video storage, serving, enrichment, aggregation, & search

- **Improved image search parsing accuracy** by broadening search metrics & testing query processing algorithm
- **Built Tripod Map/Image Viewer UI** in React.js to visualize EXIF-metadata/geodata for individual users

ARON DEVELOPERS
Full Stack Rails Developer Intern
LOS ALTOS, CA • MAY 2016 - AUG 2016

Real estate developer which focuses on building smart, luxury homes in San Francisco Bay Area

- **Effectively visualized net interest** being paid for mortgages on all unsold properties/construction sites
- **Designed & Implemented SQL Tables** for Loans database to support realtime ruby on rails data visualization dashboard

SMART CITY INFRASTRUCTURE
Computer Vision Engineer
ATLANTA, GA • AUG 2017 - PRESENT

Working under Dr. James Tsai , Dr. Tony Yezzi to develop city infrastructure monitoring/diagnosis with modern technologies

- **Developing vehicle detection, categorization & tracking** system to gather data about traffic flow/behavior patterns
- **Using YOLO Real-time object system** backed by Tensorflow implementation of darknet & trained on Udacity's Autti dataset

PROJECT RESURGENS
AHNA AI/IOT Developer
ATLANTA, GA • MAY 2016 - AUG 2017

Georgia Tech's Smart Solar Home & Internet of Things project emphasizing self-sustenance/net zero energy/carbon footprint

- **Training a classification model of electricity consumption** using outlet reading data to optimize energy consumption
- **Building cross-platform React Native App** that helps users track electricity & water savings/consumption over time

PROJECTS

RAVEN'S MATRIX SOLVER
Knowledge Based AI Project
AUG 2017 - PRESENT

Designed a Python Agent that solves Raven's Progressive Matrices, a credible measure of intelligence via visual analogies

- **Built Semantic Networks** to capture knowledge representation, backed by Numpy adjacency matrices
- **Leveraged Generate and Test** methodology to determine basic image transformation rules

LOCAL FEATURE MATCHING
Computer Vision Project
AUG 2017 - PRESENT

Wrote a Matlab algorithm for matching points between multiple views of the same physical scene

- **Implemented Harris Corner Detector** to identify interest points within corresponding images
- **Created SIFT Pipeline** to describe each interest point and accurately match corresponding points

SKILLS

LANGUAGES
- Java
- Python
- JavaScript
- Matlab
- HTML/SASS/CSS
- Ruby on Rails

LIBRARIES
- SKLearn
- OpenCV/PIL
- React/Redux
- ImmutableJS
- LeafletJS
- Android SDK

DEV TOOLS
- Jira
- Designs & Mockups (Sketch)
- Splunk
- Git/GitHub Workflow
- Linux/RHL (SSH)
- Enterprise Slack/Hipchat

RELEVANT COURSES
- Knowledge-Based AI
- Computer Vision
- Intro to AI
- Robotics & Perception
- User Interface Design
- Algorithm Design/Analysis

INTERESTS

ACTIVITIES
- **GT Qurbani** - All-Male Nationally Competitive Collegiate Bollywood Fusion Dance Team
- **Tennis** - Competed in the USTA Men's Singles Circuit
- **Recreational** - Collegiate Intramurral Ultimate Frisbee, Hiking, Rock Climbing, Camping
- **Musician** - Played Piano for 8 Years & Recorded Covers

AWARDS
- **Faculty Honors 2015, 2016** - 4.0 GPA in most recent semester
- **Dean's List** - GPA avg of 3.0 or higher
- **2nd** - Cal Berkeley National Speech Invitational (117 competitors)
- **1st** - University of Pacific Jon Schamber Speech Invitational