Ismael Abadin

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Summary

Experienced Software Engineer skilled in AI, web development, and cybersecurity, with a proven track record of excellence. Proficient in Python, React.js, C++, Rails, and Agile methodologies, complemented by a strong background in AI technologies and object-oriented programming.

Experience

- **Hunt Club Recruiting** — Folsom, CA
  Software Engineer — *Dec. 2021 - Nov. 2022*
  - Collaborated with data engineers to develop internal AI algorithm using GCP to automatically source candidates from Heroku Postgres database that matched job requirements, and suggest them to recruiters
  - Developed and shipped many features and improvements to platform search functionality, with particular emphasis on improving search results relevance and filter performance
  - Revolutionized processes within a rapidly expanding engineering team: streamlined core platform documentation, enhanced communication regarding performance-critical tasks, established recurring knowledge transfer sessions, and enforced mandatory test coverage for new pull requests.
- **Tata Consultancy Services** — Folsom, CA
  Software Engineer — *Mar. 2021 - Dec. 2021*
  - Worked in international team to develop and maintain AI software for real-world damage detection
  - Created and trained a custom object detection model to detect, classify, and analyze electrical equipment
  - Maintained systems by monitoring, identifying, and correcting software and hardware defects

Education

- **University of California, Davis** — Davis, CA
  Bachelor of Science in Computer Science — *Sept. 2015 – Mar. 2020*
- **Arizona State University** — Tempe, AZ
  Master of Computer Science - Cybersecurity — *May 2020 – July 2021*

Highlighted courses:

- **Artificial Intelligence**: neural networks, generative AI, modeling and reasoning, reinforcement learning, MDPs and POMDPs, Bayesian networks, NLP, perception-based recognition, sensors for perception, robotics
- **Advanced Computer Network Security**: packet filter firewalls, network intrusion detection/prevention, cloud network security, moving target defense in computer networks, build secure networks to counter given network attacks

Personal Projects

- **Neural Networks for Collision Prediction**: Design a custom neural network architecture to help a robot navigate a simulated environment while dynamically processing sensor inputs to avoid collisions. Created using assorted Python libraries, including PyTorch, sklearn, and numpy. Project page available here.
- **Geospatial Queries**: Use SparkSQL and Scala to extract and perform geospatial queries on data from a large, unstructured database, apply spatial statistics in the form of the Getis-Ord calculation to spatio-temporal big data to identify statistically significant geographic hotspots. Project page available here.
- **Color Palette**: React app utilizing a plethora of packages, such as react-copy-to-clipboard, chroma.js, rc-slider, Material-UI, react-sortable-hoc, emoji-mart, react-transition-group, and react-router-dom. Users can design and save color palettes. Project page available here.

Computer Skills

- **Languages & Concepts**: Python, React.js, Javascript, Flask, Django, Typescript, Node.js, Ruby on Rails, Java, Kotlin, PostgreSQL, Elasticsearch, Express, SQL, HTML5, CSS3, C, C++, C#, Computer Vision (Object Detection, YOLO, ResNet), Generative AI (GANs), Natural Language Processing
- **Tools & Systems**: Linux, AWS, Docker, Travis CI, Circle CI, Microsoft Azure, Heroku, GCP, RabbitMQ
- **Frameworks & Methodologies**: Agile (Scrum, XP), TDD, OOP