R&D Engineer for location-based services (full-time)

TRAILME is the #1 app & platform that provides real-time information during a trail running event. We strive to enhance trail running experiences and connect the trail running community with technology. www.trailme.com.hk

Role, Objective and Challenge
TRAILME is using IoT devices (beacons) to digitalize outdoor environments (e.g., trails). The role is to research and develop an advanced interactive IoT navigation solution and toolset – based on IoT devices (beacons) for outdoor use cases like TRAILME. Existing navigation and location services are mainly GPS based with imminent downsides, which can be overcome by a beacon location-based solution.

Key tasks
Research and develop an advanced interactive IoT navigation concept and solution based on IoT devices for outdoor use cases. The TRAILME solution should
- invent new algorithms and processes to navigate on trails with waypoints and digitals marked trails (using IoT devices)
- create visual and speech navigation information and directional outputs using the mobile app and connected wearable watches – e.g., Garmin or e.g., turn left in 50m
- provide a course creation and planning capability for course marking and routing with digital markers (IoT devices)
- tracking runner 's position and progress with predicted progress and alerting on deviations from the course.

Outcomes
- State-of-the art study of used technologies and best in-class practices
- Core navigation algorithm and APIs
- Course creation component
- Interface API's and wearable device integration (prototype)
- Integration with our IoT device asset management solution

Knowledge
- GPS and course / map navigation, course creations
- Hiking and Running sport APP (e.g. STRAVA) or wearables like Gamin, Coros

Competencies
- Being systematic and structured
- Capable to describe situations in details
- Good in observation
- Self-driven and curious
- Navigation on maps in outdoor

Experiences
- Agile software development / UI/UX – user journeys
- Small-medium sized project management
- Vendor and partner management, e.g., working with universities, SW suppliers.

IT-Skills
- Mobile App / Web development
- AWS cloud services (e.g., EC2, S3, ..)
- GPS tools like plotaroute, komoot
- Programming in Python, VUE framework, switft, Kotlin, ReactJS
- Mapbox or Leaflet (Mandatory)

The extra mile in outdoor
- Outdoor passionate and capable to work partially outdoor

Other requirements
- <u>Bachelor's or master's degree</u> (MANDATORY) – related to Science, Technology, Engineering and Mathematics
- Good English
- Flexible work arrangements

Key benefits
- Engage in a high innovative IoT R&D startup and growing company
- Bring your passion for outdoor sport to your workplace
- Learn from Senior Executives to run a startup
- Sponsored event participations
- Flexible office, WFH and outdoor workplace and time arrangements

Contract
- Full-time

For further information, see
- www.trailme.com.hk
- https://youtu.be/WKh1ocav4HE

Candidates
- Submit your resume
- Explain your motivation why you apply for TRAILME
- What is commitment you will bring with you
- Interview

Contact: careers@uhey.com.hk

Application Method
- Email / interview