Robotic Software Engineer
Full time - Pittsburgh, PA - Open immediately

KEF Robotics Inc. is seeking talented Robotic Software Engineers to join our four-person team. We're a brand new company (founded December, 2018) on a strong trajectory in a disruptive technology area, and have already attained a number of significant milestones:

- We were featured in the New York Times in our first 100 days as a company
- We finished as the top qualifier in Lockheed Martin’s AlphaPilot competition in our first six months as a company, ahead of numerous talented research groups
- We’re “professional drone racers”
- We won our first contract without a proposal (We don’t mind proposals. But don’t love them either...)

We’re looking for smart, bold, driven, humble researchers who bring a great attitude to work and want to help us draft out, build, and polish a great company. We want the types who dig in to their work and try to solve technical problems, and who are fearless learners and active questioners. We’re working on our first product, and we need your help to get it perfect.

KEF was founded by an experienced and proven R&D team, which arrived at drone autonomy after achieving recognition as the premier spacecraft navigation software development team in the world (The tech we pitched and built was going to land us on the Moon and Saturn’s Enceladus!). We’ve honed an ability to operate efficiently, and know how to get our message out, so you’ll be joining a competent and cohesive team with zero extra baggage.

Our office is different than where you are working now. We limit distractions and offer you a huge amount of freedom (You want to bring your dog to work? Glad you asked! Hope it likes attention...) If you need equipment or outside connections to solve a problem, we will get it for you. Our goal is to help you become a world-class expert within three years, and our philosophy is simple: bring in great talent and help them get to work.

At this early stage we’re offering substantial equity, and we offer big-company benefits where we can: subsidized healthcare for all employees, unlimited vacation (take it), and a generous 401k match. While we tackle huge technical challenges and demand excellence, working hours are reasonable -we presume that the best talent will seek robust lives outside the office.

Finally, we’re committed to diversity on the ground floor and will take the time to train great talent from unusual backgrounds. We want personality and drive over experience and expertise.

OK, look: it’s taking a lot of words to say “why we are different”, but basically it’s just this: we’re deadly serious about kicking butt, but we’re having a ton of fun while we do it. Send us a note and tell us why you’d make a great teammate!

contactus@kefrobotics.com - Linkedin & Facebook - www.kefrobotics.com
Responsibilities:

- Develop state-of-the-art autonomous drones capable of flying rapidly through challenging environments
- Research and implement new approaches within guidance, navigation, and control (GNC) and machine learning (ML)
- Optimize algorithms for real-time computation on embedded platforms
- Field test UAVs in a variety of environments, both indoors and outdoors
- Improve physics based simulation environments and validate autonomous behavior within simulation

Strongly Recommended Skills:

- Empathetic and collaborative team player
- Proficiency with C++ and Python
- Experience with robotics state estimation and simultaneous localization and mapping (SLAM) algorithms
- Experience programming for embedded environments
- Familiarity with Linux and Linux tools
- Experience in developing computer vision algorithms

Bonus Skills:

- Machine learning and experience programming within a popular ML framework (TensorFlow, PyTorch, etc)
- Hardware prototyping skills (3D printing, soldering, assembly)
- GPU programming (CUDA / OpenCL)
- Familiarity with nonlinear optimization techniques
- Familiarity with ROS (Robot Operating System)
- Unreal Engine / Unity experience
- Julia programming experience
- Clear, concise technical writing skills

Salary range: $60k-$75k
Health Care: $200/month subsidy per employee
Equity Available: Employees #5/#6, so significant equity; 1 year cliff, 5 year vest, no strings
401k Match: High (higher than any company we've ever heard of)
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