

Interested in development of next generation consumer systems? Human Network Labs (HNL) is seeking talented engineers to join its small and growing team to help the development and implementation of the next generation information systems linking virtual information within our physical space. This new technology will revolutionize the way we socialize, communicate, navigate and interact with our physical environment. Providing information when and where you need it breaking the current boundary of today's communication. If you are interested in an innovative and collaborative environment full of passionate people thriving in new challenges, HNL may be the place for you. Join us in weaving the future fabric of our everyday life.

We locate:

4548 Market Street, Philadelphia, PA, 19139

Please send your resume to:

janicia.koh@humannetworklabs.com

POSITION DESCRIPTIONS:

Position: Math Physics Modeling, Data Filtering, Statistical Analyst,

Location: Philadelphia, PA. USA

Positions: 1

Job type: Full Time/Permanent

HNL seeks for competent algorithm designers who have Mathematics, Physics OR Statistics background and would like to apply your expertise in an exciting project of integrating the world of virtual and social information within our physical world. We want someone who is excited about being on the cutting edge of development but at the same time cares about the details which provide sustainable solutions.

Responsibilities include:

- Modeling of physical dynamics, geometry and equation solving via simulation tools (such as MATLAB)
- Understand sensor behavior, relate physical state with sensor output
- Apply mathematical analysis to dynamic systems for localization/topology acquisition, such as multilateration, triangulation methods, physical modeling, etc.
- Apply data filtering, statistical techniques (Bayesian model, MLE, sensitivity analysis, etc) for smoothing and prediction analysis for collected hardware data
- Coordinating implementation with the hardware and software development team.
- Supporting the software development process, including the complete requirements analysis, design, development and testing.
- Improve performance, scalability, and sustainability of current systems
- Diagnose and debug issues in a production environment.

Preferred Experience:

- Necessary: intensive experience in data filtering, statistical analysis and computer simulation
- Necessary: basic understanding of physic dynamics, mathematics
- Preferred: robotics or autonomous vehicle systems and associated software such as Simultaneous Localization and Mapping (SLAM), Kalman Filter, Particle Filter, Monte Carlo localization, etc.
- Preferred: distributed ad-hoc wireless networks
- Preferred: MEMS sensors such as accelerometer, magnetic and gyroscopes

Required qualifications:

- A passion for learning and keeping abreast of technologies relating to low speed dynamic systems
- 2-12 years hands-on experience data filtering, physical dynamics, motion analysis; experiences such as guidance control, navigation/aerospace systems are plus
- Strong physics, maths and statistics background, and familiarity with Bayesian techniques such as: Kalman filters, particle filters, etc.
- Experience developing applications using simulation tools, Matlab, C or C++.