

MINNOWTECH

## **Computer Vision/Machine Learning Engineer**

Baltimore, MD

Help us solve a \$20 billion/year problem.

That's how much shrimp farmers spend feeding their shrimp each year. More precisely, it is how much farmers guess that their shrimp need to eat. They guess because shrimp grow in turbid waters, so farmers have no idea how many shrimp are being fed. We are going to take the guess work out of feeding by supplying farmers with low cost sonar arrays powered by algorithms developed by Dr. Suzan Shahrestani, an expert in the use of imaging systems in fisheries science and the co-founder of Minnowtech.

We're well financed, have a great network into shrimp farms around the world, are supported by a team of sonar experts and aquaculture experts, and seasoned entrepreneurs. What we are missing is a computer vision engineer to help prepare our shrimp data for farmers all over the world, where we can facilitate solutions to real-world problems in the aquaculture industry.

Minnowtech has facilities in Hawaii, so you can count on a few trips there, as well as to shrimp farms in other parts of the world. It won't be extensive travel, you'll spend most of your time in Baltimore, but you will need to have a passport and no restrictions on your ability to visit countries in equatorial climates.

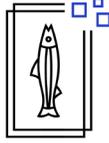
We're ready to hire today but if you need a few weeks to tie up loose ends with your current employer then we'll work with you on that.

Minnowtech is a portfolio company of Early Charm Ventures, LLC. Early Charm is a Startup Studio founded in 2012 in the Charm City (Baltimore) that converts science to business. We specialize in taking brilliant scientific discoveries made at universities and turning them into companies focused on growth. We don't chase quick exits. We build companies that create sustainable value.

### **Application Information**

Send details of your experience with real-world applications of CV to  
Kelli Booth, Principal, [kelli.booth@earlycharm.com](mailto:kelli.booth@earlycharm.com)





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### Minimum Qualifications

- Strong background in computer vision and graphics or image processing
- Knowledge of linear algebra fundamentals and optimization
- Experience with popular deep learning frameworks (Tensorflow, Caffe, or Pytorch)
- Ability to research, prototype and implement new algorithms in production-level code on an embedded platform
- Proficiency in coding with C/C++, Python, Lua, R, Matlab or a related language
- At least one finished complex, real-world CV project in role of CV developer with algorithms implementation.
- Experience in using Source Control / Project Tracking systems (Github, Jira).
- Some hands-on experience in development of computer vision/image processing algorithms for embedded systems.
- 1+ years as a Computer Vision/Machine Learning engineer with real-world experience in training framework and tools (TensorFlow, Caffe, PyTorch), model compression, inference optimization.

### Preferred Qualifications

- M.S. or Ph.D. (preferred, not required) in computer vision or a related field

### Responsibilities

- Curate annotated images that can be used to train Computer Vision/Machine Learning (CV/ML) algorithms/models.
- Augment images to simulate various real-life conditions
- Write C++ and Python code to build and enhance the platform that is used for training CV models
- Research existing research papers on CV, enhance existing Open Source models and incorporate novel techniques or create new algorithms from the ground up to solve complex use cases
- Perform QA/validation on newly trained models, provide feedback to development team on failure cases.