

Braden Michael Harris Katzman
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Interests

Computer Graphics & Vision, VR/AR, Human-Computer Interaction

Education

Columbia University in the City of New York

- B.A. in Computer Science (Intelligent Systems)
- Expected Graduation: May 2017

Stanford University

- Summer Session 2015 - Intensive Program in Computer Science

Skills

Languages: Java, MATLAB, Python, C++, C, Javascript, HTML5, CSS

Experience: Image Processing, Machine Learning, Graphics, UI/UX, Genome sequencing

IDEs/Version Control: Git/Github, Eclipse, Visual Studio, XCode, Unity

APIs, Pipelines, Architectures: Tensorflow, OpenCV, JavaFX, Scikit-learn, OpenGL

Professional Experience

Secure Systems - 1/2017 - present

- Image Processing Engineer

Memorial Sloan Kettering Cancer Center - Zhirong Bao Biology Lab: 8/2015 - present

- Software Engineer (Full Stack), biology research applications (*WormGUIDES*, *AceTree*)

Columbia University Software Systems Laboratory: 8/15 - 5/16

- Deep Linking & Universal Sharing research on the Android OS, Unity Game Engine

Dolfyn - Mobility division of *Accrete Solutions, LLC*: 3/15 - 9/15

Projects

 - all code bases available on <http://github.com/bradenkatzman>

WormGUIDES - 4-dimensional developmental atlas for C. Elegans embryogenesis research

- Description: <http://bmcbioinformatics.biomedcentral.com/articles/10.1186/s12859-015-0627-8>
- Source: <https://github.com/bradenkatzman/WormGUIDES>

AceTree - CV pipeline and UI for segmentation, lineaging and visualization of C. Elegans embryogenesis

- Description: <http://bmcbioinformatics.biomedcentral.com/articles/10.1186/1471-2105-7-275>
- Source: <https://github.com/bradenkatzman/AceTree>

Single Cell RNA-Seq Data Classification via Machine Learning (Computational Genomics course project)

- Classifiers Used: SVMs, KNN, Neural Networks, Random Forests
- Source: <https://github.com/bradenkatzman/CellClassificationMachineLearning>

P!x - image manipulation with OpenGL, noise reduction (Intro Computer Graphics course project)

<http://lculpa.herokuapp.com> - Professor Review database and UI, Flask (Personal Project)