Master’s Thesis outline

Last updated May 19, 2016

Chapter 1 - Introduction

Chapter 2 – Imaging systems

* Microscopy system Design
* Phase retrieval
* Practical considerations

Chapter 3 – Portable Imaging Devices

* Cellscope Device
* Computational Cellscope

Chapter 4 – Phase retrieval techniques

* DIC + Phase Contrast
* TIE Imaging / Color TIE
* Differential Phase Contrast
* Color-Multiplexed DPC

Chapter 5 – Portable High-Throughput Phase Imaging Devices

* FPM on Cellscope
* Motion Deblurring for portable devices

Chapter 6 – Conclusions and Future Work

Things that need to happen