# Problem Set #4

Perspectives on Computational Modeling
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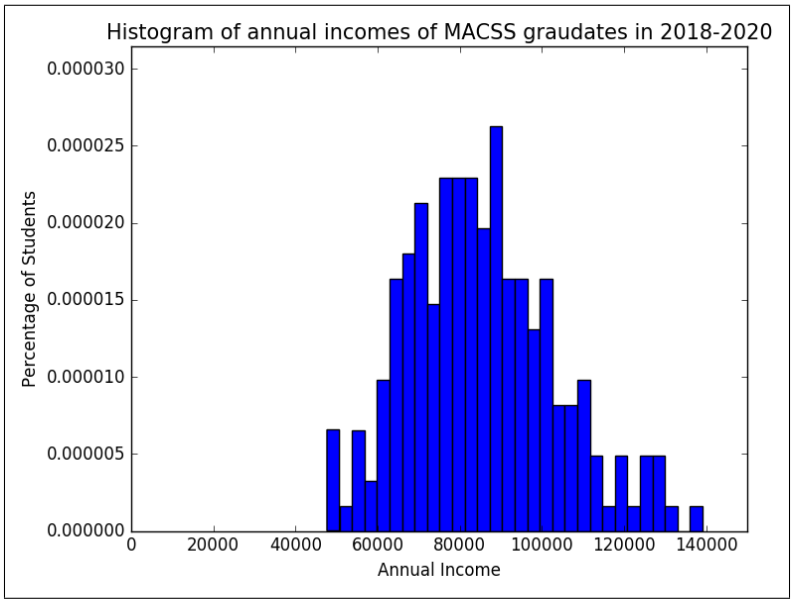
## Problem 1.

### Part (a). Histogram



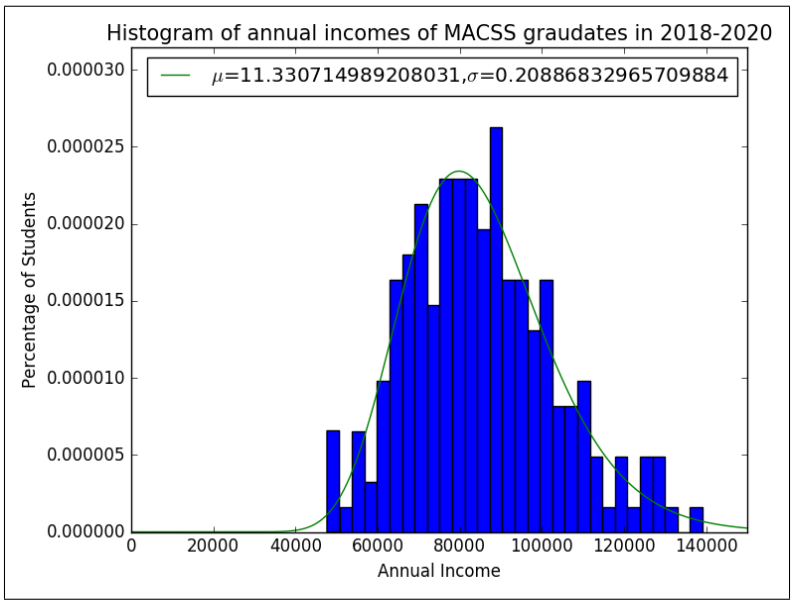

### Part (b). Lognormal PDF Function

The Lognormal PDF Values: [[ 0.0019079 0.00123533],[ 0.00217547 0.0019646 ]]

## Part (c). One step SMM

SMM crietron function value = 7.20176829e-14
SMM estimated mu = 11.3307149892
SMM estimated sigma = 0.208868329657

| Moments | Mean | Var |
|---|---|---|
| Data | 85276.8236063 | 323731572.23 |
| Model | 85276.8464227 | 323731565.513 |
| Percentage Difference | 2.67557875682e-05 | -2.07476758571e-06 |



## Part (d). Two step SMM

SMM crietron function value = 0.01202398
SMM estimated mu = 11.3307146745
SMM estimated sigma = 0.208868331657

| Moments | Mean | Var |
|---|---|---|
| Data | 85276.8236063 | 323731572.23 |
| Model | 85276.8196196 | 323731368.346 |
| Percentage Difference | -4.67498781548e-06 | -6.29791104274e-05 |