This document explains the empirical model we used. We used R to generate regression results because R has a package (stargazer) that formats regression output into tables that we show below. The following tables and graphs are all generated from R code.

For Table 1, we run the following model:

$$Salary_i = \gamma StateCharacterstics_j + \epsilon_i$$

where each unit of observation i is a job posting on glassdoor, and $StateCharacterstics_j$ is a state-level variable. We add variables incrementally.

For Table 2, we run the following model:

$$Salary_i = \gamma StateCharacterstics_j + \delta CompanyCharacteristics_k + \epsilon_i$$

where each unit of observation i is a job posting on glassdoor, $StateCharacterstics_j$ are state-level variables, and $CompanyCharacterics_k$ are company-level variables. We add variables incrementally.

For Table 3, we run the following model:

$$Salary_i = \gamma StateCharacterstics_j + \delta CompanyCharacteristics_k + \beta JobCharacteristics_i + \epsilon_i$$

where each unit of observation i is a job posting on glassdoor, $StateCharacterstics_j$ are state-level variables, $CompanyCharacterics_k$ are company-level variables, and $JobCharacteristics_i$ are job-posting-level variables. We add variables incrementally.

We then plot the residuals against state-level variables including Monthly Median Owner Cost, Percentage Employed in Tech, and Percentage With College Degree for selected models (Table 1 Col 6, Table 2 Col 6, and Table 3 Col 2). We also plot the distribution of residuals for these selected models.

Table 1: Regressions on state level variables

	Dependent Variable: Annual Salary (in 1000s)					
Median Cost to Own a Home (Monthly)	0.022***	0.011***	0.020***	0.020***	0.019***	0.023***
	(0.001)	(0.002)	(0.003)	(0.003)	(0.004)	(0.005)
Percentage Employed in Tech		11.200***	12.000***	12.500***	12.700***	13.000***
		(1.760)	(1.760)	(1.870)	(1.900)	(1.910)
Percentage of College Graduates			−0.800***	−0.870***	−0.930***	−0.962***
			(0.153)	(0.176)	(0.206)	(0.207)
Population (In Households)				−0.00000	−0.00000	−0.00000
				(0.00000)	(0.00000)	(0.00000)
Median Income					0.0001	0.0001
					(0.0001)	(0.0002)
Median Rent (Monthly)						−0.010
						(0.006)
Constant	68.400***	68.100***	80.700***	81.600***	80.200***	80.400***
	(2.630)	(2.620)	(3.550)	(3.730)	(4.520)	(4.530)
Observations	4,409	4,409	4,409	4,409	4,409	4,409
R^2	0.048	0.057	0.063	0.063	0.063	0.063
Note:						*p<0.1; **p<0.05; ***p<0.01

Table 2: Regressions on state level variables with company level variables as controls

	Dependent Variable: Annual Salary (in 1000s)					
	OLS			*felm*		
Median Cost to Own a Home (Monthly)	0.024***	0.033***	0.028***	0.028***	0.025***	0.025***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Percentage Employed in Tech	13.300***	12.500***	12.300***	12.400***	12.400***	12.800***
	(1.960)	(2.120)	(2.070)	(2.050)	(2.020)	(1.970)
Percentage of College Graduates	−0.976***	−0.976***	−0.790***	−0.754***	−0.737***	−0.744***
	(0.213)	(0.232)	(0.227)	(0.225)	(0.221)	(0.216)
Population (In Households)	−0.00000	−0.00000	−0.00000	−0.00000	−0.00000	−0.00000
	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Median Income	0.0001	−0.00003	−0.0001	−0.00004	−0.00003	−0.00003
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Median Rent (Monthly)	−0.011	−0.019***	−0.012*	−0.011	−0.009	−0.011*
	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Company Star Rating	1.340	2.840*	3.050**	4.130***	6.160***	4.140***
	(1.260)	(1.540)	(1.520)	(1.550)	(1.540)	(1.580)
Year Company Was Founded		0.115***	0.126***	0.141***	0.084***	0.068***
		(0.011)	(0.012)	(0.012)	(0.013)	(0.014)
Constant	76.700***	−146.000***				
	(6.600)	(22.300)				
Company Revenue FE	No	No	Yes	Yes	Yes	Yes
Company Size FE	No	No	No	Yes	Yes	Yes
Company Type FE	No	No	No	No	Yes	Yes
Company Sector FE	No	No	No	No	No	Yes
Observations	4,215	3,688	3,688	3,688	3,688	3,688
R^2	0.065	0.097	0.147	0.166	0.200	0.252

Note: *p<0.1; **p<0.05; ***p<0.01

Table 3: Regressions on state level variables with company level variables and job titles as controls

	Dependent Variable: Annual Salary (in 1000s)	
Median Cost to Own a Home (Monthly)	0.024***	0.020***
	(0.005)	(0.005)
Percentage Employed in Tech	13.200***	10.500***
	(1.860)	(1.760)
Percentage of College Graduates	−0.832***	−0.409**
	(0.205)	(0.194)
Population (In Households)	−0.00000	0.00000
	(0.00000)	(0.00000)
Median Income	−0.00002	−0.00001
	(0.0001)	(0.0001)
Median Rent (Monthly)	−0.012*	−0.007
	(0.006)	(0.006)
Company Star Rating	3.250**	3.280**
	(1.490)	(1.400)
Year Company Was Founded	0.062***	0.059***
	(0.013)	(0.013)
Company Revenue FE	Yes	Yes
Company Size FE	Yes	Yes
Company Type FE	Yes	Yes
Company Sector FE	Yes	Yes
Job Title FE	Yes	Yes
Job Seniority FE	No	Yes
Observations	3,688	3,688
R^2	0.340	0.416
Note:		*p<0.1; **p<0.05; ***p<0.01

Figure 1: Residuals from model in Table (1) Column (6)

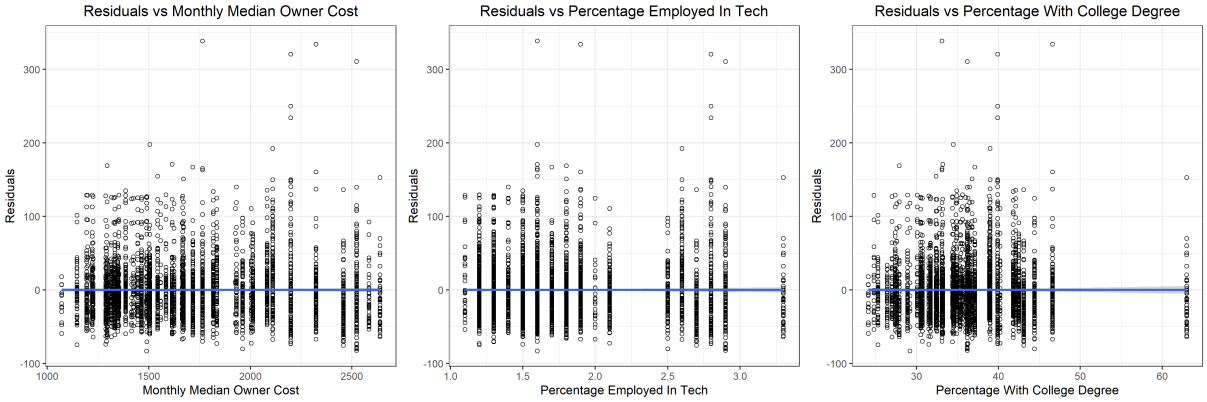

Figure 2: Residuals from model in Table (2) Column (6)

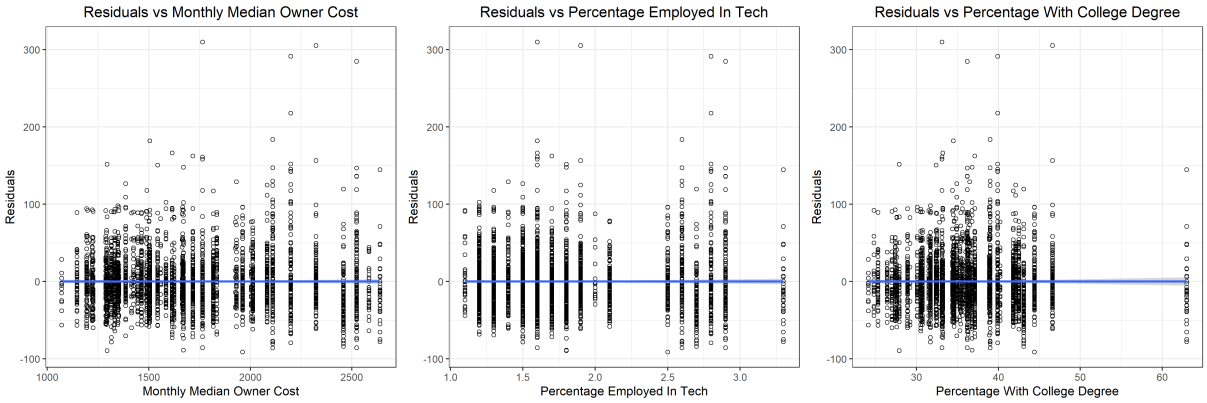

Figure 3: Residuals from model in Table (3) Column (2)

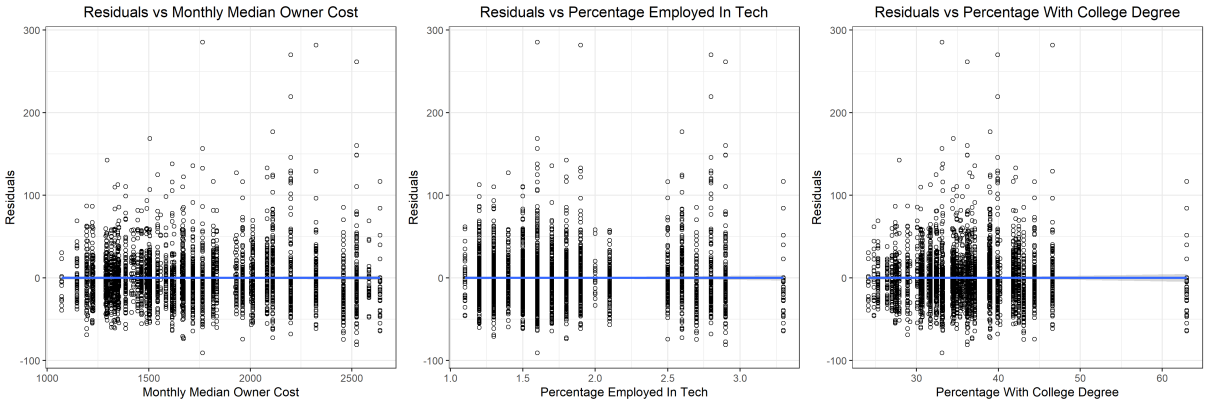

Figure 4: Distribution of Residuals